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MALARIAL FEVERS.

PREVALENCE AND GEOGRAPHIC DISTRIBUTION IN SOUTH CAROLINA, GEORGIA, AND FLORIDA.

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This study is based upon morbidity reports collected by means of reply postal cards addressed to all physicians in the States of South Carolina, Georgia, and Florida.

The postal cards were mailed each month and called for certain information for the months of August, September, October, and November, 1913, except in the State of Georgia, from which reports were received for the first three mentioned months. The replies averaged for the three States 15.71 per cent of the cards which reached the physicians.

The form of reply postal card used was as follows:

1. Does malarial fever prevail in your community?.....
2. How many cases have you treated during.....
Whites.....Colored.....
3. What types prevail?.....
(Tertian.) (Quartan.) (Estivo-autumnal.)
4. In how many was diagnosis confirmed microscopically?.....
(Tertian.) (Quartan.) (Estivo-autumnal.)
5. How many of your cases are chronic?.....
6. What number of cases occurred in children under 15 years of age?.....
7. Are any children undeveloped, mentally or physically, on account of chronic malaria?.....
8. Do mosquitoes prevail in your community?..... What species?.....
9. Are there any swamps or poorly drained lands in your community?.....
10. What prophylactic measures, if any, are being taken against malaria?.....

South Carolina.

The following table gives a general summary of the postal-card replies received:

	August.	September.	October.	November.
Number of cards mailed.....	1,275	1,275	1,275	1,275
Number of cards returned unclaimed.....	2	2	2	2
Number of replies received.....	392	231	191	136
Percentage of replies received.....	30.745	18.11	15.02	10.66
Number of counties represented in replies.....	43	40	41	39
Number of counties not heard from.....	1	4	3	5

	August.	September.	October.	November.
Number of towns or cities represented in replies.....	95	124	135	86
Number of cases of malaria reported.....	6,195	3,490	1,796	519
Whites.....	3,147	1,691	927	281
Colored.....	3,048	1,799	869	238
Average number of cases per physician reported.....	15.8	15.13	9.4	3.81
Number of cases of malaria confirmed microscopically..	607	170	70	49
Tertian.....	415	117	42	27
Quartan.....	121	14	16	10
Estivo-autumnal.....	71	39	12	12
Number of chronic cases of malaria reported.....	762	408	267	119
Number of cases under 15 years of age.....	1,342	1,068	403	114
Number of physicians using microscope.....	79	40	20	19

GENERAL PREVALENCE.

Malarial-fever cases have been reported to exist in every county but one, namely, Jasper, from which no report was received for the four months covered by this report.

The following table gives the number of cases reported, by color, in the different counties:

Name of county.	August.		September.		October.		November.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Abbeville.....	50	91	23	28	20	15	6	0
Aiken.....	103	54	46	92	11	3	25	8
Anderson.....	46	12	8	11	3	0	4	0
Bamberg.....	49	22	13	11	(1)	(1)	7	4
Barnwell.....	87	123	19	16	23	13		
Beaufort.....	7	31	10	20	4	9	0	2
Berkley.....	25	75	45	100	15	22	30	18
Calhoun.....	42	107	26	65	9	21		
Charleston.....	23	87	20	207	3	36	9	13
Cherokee.....	52	1	23	0			0	0
Chester.....	83	74	3	8	30	23	4	1
Chesterfield.....	33	36	18	15	6	8	0	3
Clarendon.....	55	10	34	13	14	7	0	4
Colleton.....	88	61	(1)	(1)	4	6	(1)	(1)
Darlington.....	32	38	25	26	32	43	9	7
Dillon.....	38	25	19	25	11	5		
Dorchester.....	26	40	35	39	7	9	3	0
Edgefield.....	28	39	9	9	6	6	0	5
Fairfield.....	56	83	16	30	33	33	12	20
Florence.....	71	74	129	75	11	17	15	3
Georgetown.....	269	279	147	113	78	47	8	9
Greenville.....	70	20	36	0	7	4	10	1
Greenwood.....	29	27	19	4	14	22	2	1
Hampton.....	122	103	10	10	72	85	7	39
Horry.....	30	0	(1)	(1)	21	9	10	20
Jasper.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Kershaw.....	150	110	16	12	1	0	8	3
Lancaster.....	45	33	(1)	(1)	2	0	(1)	(1)
Laurens.....	69	52	10	4	35	22	18	10
Lee.....	16	11	0	0	5	0	(1)	(1)
Lexington.....	43	32	44	26	7	12	(1)	(1)
Marion.....	122	23	70	15	(1)	(1)		
Marlboro.....	23	35	4	2	14	16	9	2
Newberry.....	92	97	6	3	54	88	12	19
Oconee.....	0	0	22	1	19	2	6	2
Orangeburg.....	170	145	280	330	109	102	2	3
Pickens.....	44	10	4	0	0	0	0	0
Richland.....	203	178	43	61	27	2	25	26
Saluda.....	25	19	27	13	18	9	11	4
Spartanburg.....	89	30	87	24	21	6	15	4
Sumter.....	234	448	62	143	13	48	4	4
Union.....	45	16	42	28	13	4	5	3
Williamsburg.....	204	279	217	160	28	34		
York.....	59	18	74	60	127	81	5	0
Total.....	3,147	3,048	1,691	1,799	927	869	281	238

¹ No report.

It also appears that malarial fevers prevailed equally during the months of August and September, subsiding in October; for November there was about one-third of the number of cases that occurred in October.

TYPES OF INFECTION.

The tertian type of infection prevails. The number of counties in which the types of infection were reported are given in the following table:

Types.	Counties.			
	August.	September.	October.	November.
Tertian.....	2	6	10	6
Quartan.....	0	0	0	1
Estivo-autumnal.....	0	1	1	3
Tertian and quartan.....	0	2	3	6
Tertian and estivo-autumnal.....	2	4	2	4
Quartan and estivo-autumnal.....	0	0	1	0
Tertian, quartan, and estivo-autumnal.....	38	25	21	14
Not stated.....	1	1	2	3
None.....	0	1	1	2
No report.....	1	4	3	5
	44	44	44	44

The number of counties in which the types of infection were reported to have been confirmed microscopically during the four months were as follows:

Types.	Counties.			
	August.	September.	October.	November.
Tertian.....	5	8	3	2
Quartan.....	0	0	2	0
Estivo-autumnal.....	1	2	3	0
Tertian and quartan.....	4	3	3	2
Tertian and estivo-autumnal.....	4	5	3	3
Quartan and estivo-autumnal.....	0	0	0	1
Tertian, quartan, and estivo-autumnal.....	9	1	0	1
Not stated.....	0	1	1	2
None.....	20	20	26	28
No report.....	1	4	3	5
	44	44	44	44

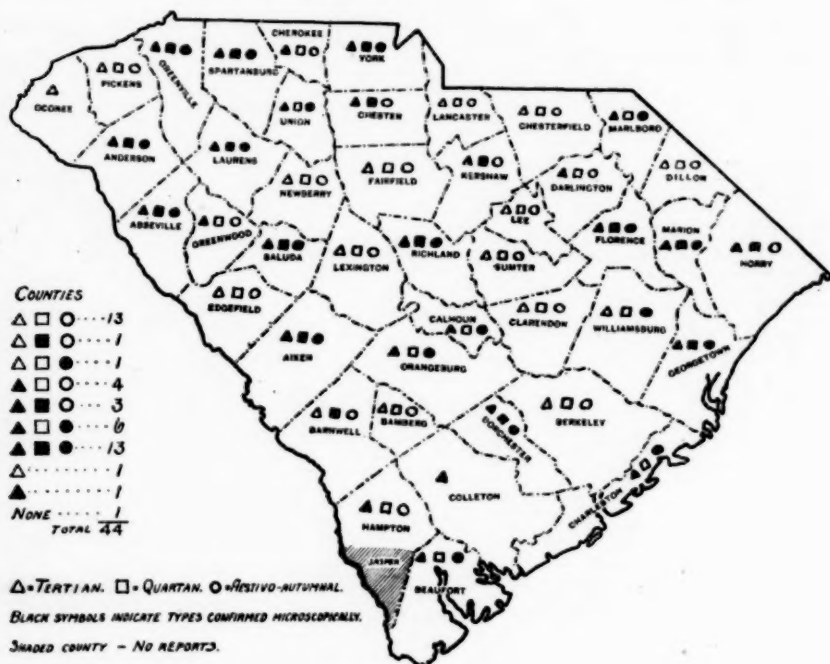
The counties in which the different types have been reported during the four months are shown by symbols in the accompanying map No. 1.

DIAGNOSIS CONFIRMED MICROSCOPICALLY.

The following table gives the number of physicians who report using the microscope, the number of counties represented, and the number of cases in which the diagnosis was confirmed microscopically, as shown in the reports received each month.

Months.	Physicians.	Counties.	Cases.
August.....	79	23	607
September.....	40	20	170
October.....	20	15	70
November.....	19	11	49

MAP NO. 1.—TYPES OF INFECTION REPORTED.
SOUTH CAROLINA



CHRONIC MALARIA.

A summary of the reports made of chronic cases of malaria each month is here given:

Months.	Physicians.	Counties.	Cases.
August.....	159	39	762
September.....	79	33	408
October.....	53	30	267
November.....	29	21	119

CHILDREN UNDER 15 YEARS OF AGE.

There was a total of 12,000 cases of malaria in the State for the four months, of which number 2,927 were reported to have occurred in children under 15 years of age. This represents 24.39 per cent of the total number of cases reported.

CHILDREN UNDEVELOPED, MENTALLY AND PHYSICALLY.

For the month of August, 72 physicians from 32 counties; for September, 37 physicians from 22 counties; for October, 29 physicians from 19 counties; and for November, 13 physicians from 10 counties, stated that there were children undeveloped, mentally and physically, on account of chronic malaria.

MOSQUITOES.

The kinds of mosquitoes reported as prevailing in the various counties were as follows:

Kind.	Counties.			
	August.	September.	October.	November.
Anopheles.....	12	11	10	11
Culex.....	1	0	2	1
Stegomyia.....	0	0	0	1
Anopheles and Culex.....	24	16	17	7
Anopheles and Stegomyia.....	0	0	0	0
Culex and Stegomyia.....	0	0	0	0
Anopheles, Culex, and Stegomyia.....	4	4	2	1
Unknown.....	2	8	9	16
Not stated.....	0	0	1	1
None.....	0	1	0	1
No report.....	1	4	3	5
	44	44	44	44

SWAMPS AND POORLY DRAINED LANDS.

Swamps and poorly drained lands were reported to exist in every county in the State, from which reports were received.

PROPHYLACTIC MEASURES.

One or more of the following prophylactic measures were reported as being in use in every county of the State, but no systematic eradivative measures were reported as being employed in any place: Oiling, screening, drainage, quinine, mosquito nets, destruction of breeding places, general sanitation.

Florida.

The following table gives a general summary of the postal card replies received:

	August.	September.	October.	November.
Number cards mailed.....	974	956	956	956
Number of cards returned unclaimed.....	22	18	4	8
Number of replies received.....	298	166	176	136
Percentage of replies received.....	30.59	17.36	16.31	14.22
Number of counties represented in replies.....	49	43	41	38
Number of counties not heard from.....	1	7	9	12
Number of towns or cities represented in replies.....	159	97	98	87
Number of cases of malaria reported.....	4,498	2,141	1,702	849
Whites.....	2,867	1,338	1,044	530
Colored.....	1,631	803	658	319

	August.	September.	October.	November.
Average number of cases per physician reported.....	15.09	12.9	9.67	6.24
Number of cases of malaria confirmed microscopically..	691	322	199	137
Tertian.....	467	281	115	81
Quartan.....	76	16	25	26
Estivo-autumnal.....	148	25	59	28
Number of chronic cases of malaria reported.....	717	542	283	194
Number of cases under 15 years of age.....	1,145	609	490	216
Number of physicians using microscope.....	93	53	43	28

GENERAL PREVALENCE.

Malarial fever cases have been reported to exist in every county of Florida except Liberty County, and from this county no report was received.

The following table gives the number of cases reported each month, by color, in the different counties:

Name of county.	August.		September.		October.		November.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Alachua.....	191	121	45	71	182	131	10	10
Baker.....	20	0	(1)	(1)	(1)	(1)	(1)	(1)
Bay.....	50	18	4	0	12	8	(1)	(1)
Bradford.....	21	6	23	26	5	0		
Brevard.....	0	0	2	2	0	0	(1)	(1)
Calhoun.....	0	0	45	15	48	67	42	31
Citrus.....	9	7	23	10	75	30	10	15
Clay.....	0	0	15	5	(1)	(1)	(1)	(1)
Columbia.....	0	0	16	14	3	3	3	2
Dade.....	31	1	27	0	6	1	6	0
Desoto.....	120	19	56	18	12	3	65	17
Duval.....	96	54	84	20	20	3	52	15
Escambia.....	28	5	37	3	21	4	32	1
Franklin.....	20	0	(1)	(1)	(1)	(1)	(1)	(1)
Gadsden.....	87	73	15	10	5	7	8	0
Hamilton.....	17	18	31	20	28	31	7	5
Hernando.....	47	70	(1)	(1)	12	18	(1)	(1)
Hillsboro.....	142	89	39	7	42	26	9	0
Holmes.....	10	2	72	24	24	14	8	6
Jackson.....	71	51	154	135	22	23	59	41
Jefferson.....	47	24	5	2	(1)	(1)	(1)	(1)
Lafayette.....	98	14	9	4	38	0	26	0
Lake.....	18	15	0	0	0	0	0	0
Lee.....	27	5	10	6	23	4	1	0
Leon.....	16	0	12	4			15	35
Levy.....	180	255	(1)	(1)	43	28		
Liberty.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Madison.....	51	69	17	3	81	70	13	2
Manatee.....	79	63	79	48	63	28	3	0
Marion.....	232	168	25	45	48	28	23	26
Monroe.....	8	0	3	1	0	0	0	0
Nassau.....	316	108	3	1	1	2	0	1
Orange.....	39	35	14	57	4	3	13	10
Osceola.....	11	0	6	0	0	0	4	26
Palm Beach.....	40	25	25	10	0	0	0	16
Pasco.....	15	9	0	0	29	9	7	0
Pinellas.....	23	5	4	0	3	0	16	10
Polk.....	61	34	203	80	20	20	13	1
Putman.....	11	5	10	17	21	14	13	0
St. John.....	56	28	20	30	9	9	1	0
St. Lucia.....	17	15	38	25	28	5	5	3
Santa Rosa.....	27	3	9	5	(1)	(1)	(1)	(1)
Seminole.....	19	22	1	0			2	1
Sumter.....	12	0	55	2	(1)	(1)		
Suwanee.....	203	85	74	43	70	45	44	27
Taylor.....	30	20	(1)	(1)			(1)	(1)
Volusia.....	102	47	19	14	23	14	14	7
Wakulla.....	12	8	(1)	(1)	19	10	(1)	(1)
Walton.....	24	0			4	0	6	6
Washington.....	53	35	7	8	(1)	(1)	13	5
Total.....	2,967	1,631	1,338	803	1,044	658	530	319

¹ No report.

It appears that malarial fevers prevailed most in August, diminishing during the succeeding months. This is shown by the average number of cases per physician reporting, which was 15.09 for August, 12.9 for September, 9.67 for October, and 6.24 for November.

TYPES OF INFECTION.

Of all cases reported for the period 70.1 per cent were tertian, 10.6 per cent quartan, and 19.3 per cent estivo-autumnal.

The number of counties in which the types of infection were reported are given in the following table:

Types.	Counties.			
	August.	September.	October.	November.
Tertian.....	4	5	7	8
Quartan.....	0	0	0	0
Estivo-autumnal.....	0	1	0	2
Tertian and quartan.....	2	2	0	3
Tertian and estivo-autumnal.....	10	7	10	7
Quartan and estivo-autumnal.....	1	0	0	0
Tertian, quartan, and estivo-autumnal.....	31	23	19	14
Not stated.....	0	3	0	1
None.....	1	2	5	3
No report.....	1	7	9	12
	50	50	50	50

The number of counties in which the types of infection were reported to have been confirmed microscopically during the four months were as follows:

Types.	Counties.			
	August.	September.	October.	November.
Tertian.....	10	12	1	7
Quartan.....	1	2	0	0
Estivo-autumnal.....	3	0	6	2
Tertian and quartan.....	0	0	1	0
Tertian and estivo-autumnal.....	9	4	7	3
Quartan and estivo-autumnal.....	2	0	0	0
Tertian, quartan, and estivo-autumnal.....	9	4	6	4
None.....	14	21	19	20
Not stated.....	1	0	1	2
No report.....	1	7	9	12
	50	50	50	50

The counties in which the different types have been reported during the four months are shown by symbols in the accompanying map No. 2.

DIAGNOSIS CONFIRMED MICROSCOPICALLY.

The following table gives the number of physicians who report using the microscope, the number of counties represented, and the number of cases in which the diagnosis was confirmed microscopically, as shown in the reports received each month.

Months.	Physicians.	Counties.	Cases.
August.....	93	35	691
September.....	53	22	322
October.....	43	22	199
November.....	28	18	137

MAP NO. 2.—TYPES OF INFECTION REPORTED.



CHRONIC MALARIA.

A summary of the reports made of chronic cases of malaria each month is here given:

Months.	Physicians.	Counties.	Cases.
August.....	132	42	717
September.....	67	31	542
October.....	55	29	285
November.....	40	22	194

CHILDREN UNDER 15 YEARS OF AGE.

There was a total of 9,190 cases of malaria reported in the State for the four months, of which number 2,460 were said to have occurred in children under 15 years of age. This represents 26.76 per cent of the total number of cases reported.

CHILDREN UNDEVELOPED, MENTALLY AND PHYSICALLY.

For the month of August, 85 physicians in 37 counties; for September, 59 physicians in 25 counties; for October, 36 physicians in 20 counties, and for November, 27 physicians in 21 counties, stated that there were children undeveloped, mentally and physically, on account of chronic malaria.

MOSQUITOES.

The kinds of mosquitoes reported as prevailing in the various counties were as follows:

Kind.	August.	September.	October.	November.
Anopheles.....	11	9	11	9
Culex.....	0	2	1	3
Stegomyia.....	0	0	0	1
Anopheles and Culex.....	11	6	14	6
Anopheles and Stegomyia.....	0	1	1	0
Culex and Stegomyia.....	1	3	2	1
Anopheles, Culex, and Stegomyia.....	14	6	3	2
Unknown.....	11	14	8	15
Not stated.....	1	1	0	1
None.....	0	1	1	0
No report.....	1	7	9	12
	50	50	50	50

SWAMPS AND POORLY DRAINED LANDS.

Swamps and poorly drained lands were reported to exist in every county in the State, from which reports were received.

PROPHYLACTIC MEASURES.

One or more of the following prophylactic measures were mentioned as being in use in every county of the State, except in the counties of Baker and Wakulla, in which counties no measures were reported: Oiling, screening, drainage, quinine, mosquito nets, destruction of breeding places, general sanitation, education.

No systematic eradication measures were reported as being employed in any place.

Georgia.

The following table gives a general summary of the postal card replies received:

	August.	September.	October.
Number of cards mailed.....	3,000	3,000	3,000
Number of cards returned unclaimed.....	38	59	8
Number of replies received.....	502	296	286
Percentage of replies received.....	16.73	9.86	9.53
Number of counties represented in replies.....	126	107	116
Number of counties not heard from.....	22	41	32
Number of towns or cities represented in replies.....	271	183	233
Number of cases of malaria reported.....	4,824	2,468	2,533
Whites.....	2,818	1,491	1,580
Colored.....	2,006	977	953
Average number of cases per physician reported.....	9.59	8.34	8.85
Number of cases of malaria confirmed microscopically.....	630	252	328
Tertian.....	397	172	194
Quartan.....	100	15	51
Estivo-autumnal.....	133	65	83
Number of chronic cases of malaria reported.....	668	299	370
Number of cases under 15 years of age.....	1,260	735	591
Number of physicians using microscope.....	112	43	47

GENERAL PREVALENCE.

Malarial fever cases have been reported to exist in every county from which reports were received except Gilmer and Upson Counties, from which all reports were in the negative. No reports were received from Charlton, Chattahoochee, Clinch, Echols, Liberty, Lumpkin, McIntosh, and Union for the three months covered by this report.

The following table gives the number of cases reported, by color, in the different counties:

Name of county.	August.		September.		October.	
	White.	Colored.	White.	Colored.	White.	Colored.
Appling.....	12	8	(1)	(1)	5	0
Baker.....	(1)	(1)			(1)	(1)
Baldwin.....	12	0	16	2	3	3
Banks.....	65	35	15	0	10	0
Bartow.....	77	9	17	3	8	0
Ben Hill.....	5	3	13	0	(1)	(1)
Berrien.....	74	40	58	28	16	11
Bibb.....	69	21	77	27	2	4
Bleckley.....			8	12	4	6
Brooks.....	0	49	20	36	30	10
Bryan.....	(1)	(1)	(1)	(1)	2	2
Bulloch.....	9	3	8	5	9	3
Burke.....	40	80	30	70	45	35
Butts.....	2	2	8	0	0	0
Calhoun.....	(1)	(1)	7	13	15	33
Camden.....	8	4	(1)	(1)	(1)	(1)
Campbell.....	0	0	(1)	(1)	1	0
Carroll.....	21	10	9	0	6	4
Catoosa.....	13	3	(1)	(1)	10	2
Charlton.....	(1)	(1)	(1)	(1)	(1)	(1)
Chatham.....	80	15	25	3	5	3
Chattahoochee.....	(1)	(1)	(1)	(1)	(1)	(1)
Chattooga.....	15	2	(1)	(1)	3	0
Cherokee.....	0	0	0	0	1	0
Clarke.....	7	5	6	1	0	0
Clay.....	4	8	6	6	(1)	(1)
Clayton.....	7	5	1	0	4	3

¹ No report.

Name of county.	August.		September.		October.	
	White.	Colored.	White.	Colored.	White.	Colored.
Clinch.....	(1)	(1)	(1)	(1)	(1)	(1)
Cobb.....	7	1	4	0	0	4
Coffee.....	78	23	49	18	15	4
Colquitt.....	5	2	6	0	45	10
Columbia.....	1	2	1	1	12	12
Coweta.....	4	0	0		7	10
Crawford.....	1	0	(1)	(1)	(1)	(1)
Crisp.....	21	14	(1)	(1)	(1)	(1)
Dade.....	3	5	(1)	(1)	(1)	(1)
Dawson.....	0	0	0	0	2	0
Decatur.....	302	461	177	145	25	23
DeKalb.....	0	0	6	5	1	0
Dodge.....	17	5			140	80
Dooley.....	10	5	23	4	(1)	(1)
Dougherty.....	9	17	3	5	37	11
Douglas.....	(1)	(1)			0	0
Early.....	20	18	(1)	(1)	55	30
Echols.....	(1)	(1)	(1)	(1)	(1)	(1)
Effingham.....	(1)	(1)	(1)	(1)	2	0
Elbert.....	31	25	14	5	37	15
Emanuel.....	23	9	4	2	9	15
Fannin.....	(1)	(1)	0	0	0	0
Fayette.....	9	1	(1)	(1)	(1)	(1)
Floyd.....	113	34	8	4	31	14
Forsyth.....	0	0	(1)	(1)	(1)	(1)
Franklin.....	68	28	20	16	17	14
Fulton.....	70	6	21	13	8	4
Gilmer.....	0	0	0	0	0	0
Glascok.....	23	8	(1)	(1)		
Glynn.....	15	5			3	0
Gordon.....	30	10	35	5	(1)	(1)
Grady.....	12	5	4		(1)	(1)
Greene.....	8	15	0	0	1	0
Gwinnett.....	2	0	0	0	5	3
Habersham.....	0	0	6	0	0	0
Hall.....	13	2	0	0	0	0
Hancock.....	8	10	0	0	(1)	(1)
Haralson.....	18	1	15	5	0	0
Harris.....			1	0	0	0
Hart.....	2	0	0	0	0	0
Heard.....	(1)	(1)	(1)	(1)	0	0
Henry.....	17	7	2	2	0	0
Houston.....	45	35	22	23		
Irwin.....	40	10	52	36	75	26
Jackson.....	145	65	91	29	78	28
Jasper.....	10	10	(1)	(1)	4	0
Jeff Davis.....	90	27				
Jefferson.....	10	5	48	44	16	25
Jenkins.....	31	69	4	6	26	17
Johnson.....	18	11	14	6	(1)	(1)
Jones.....	5	3	0	0	4	6
Laurens.....	25	15	(1)	(1)	9	1
Lee.....	(1)	(1)	15	45	10	12
Liberty.....	(1)	(1)	(1)	(1)	(1)	(1)
Lincoln.....	10	2	(1)	(1)	(1)	(1)
Lowndes.....	44	18	20	6	159	51
Lumpkin.....	(1)	(1)	(1)	(1)	(1)	(1)
McDuffie.....	5	10	(1)	(1)		
McIntosh.....	(1)	(1)	(1)	(1)	(1)	(1)
Macon.....	57	63	(1)	(1)	38	54
Madison.....	18	7			(1)	(1)
Marion.....	(1)	(1)			(1)	(1)
Meriwether.....	13	7	2	1	2	0
Miller.....	40	10	25	15	20	10
Milton.....	5	0	(1)	(1)	0	0
Mitchell.....	26	60	130	69	7	2
Monroe.....	7	8	(1)	(1)	0	0
Montgomery.....	39	22	(1)	(1)	27	12
Morgan.....					2	3
Murray.....	0	0	1	0	0	0
Muscogee.....	45	2	15	9	(1)	(1)
Newton.....	1	0	0	2	0	0
Oconee.....	0	12	(1)	(1)		
Oglethorpe.....	2	1	4	0	5	14
Paulding.....			(1)	(1)	(1)	(1)
Pickens.....	1	0	3	0	0	0
Pierce.....	4	0	6	4	0	0
Pike.....	5	4	12	8	4	6
Polk.....	44	7	13	2	9	0
Pulaski.....	7	0	8	2	8	10

1 No report.

Name of county.	August.		September.		October.	
	White.	Colored.	White.	Colored.	White.	Colored.
Putnam.....	(1)	(1)	(1)	(1)	30	45
Quitman.....					0	0
Rabun.....	12	31	8	12	5	7
Randolph.....	36	59	40	39	3	2
Richmond.....	(1)	(1)	(1)	(1)	8	3
Rockdale.....	5	2	3	1	(1)	(1)
Schley.....	4	14	22	16	119	122
Screven.....	3	0	0	0	28	0
Spalding.....	29	6	15	0	29	4
Stephens.....	17	28	10	22	4	8
Stewart.....	16	19	20	30	11	14
Sumter.....	0	0	(1)	(1)	0	0
Talbot.....	14	21	2	1	3	4
Taliaferro.....	7	4	1	1	6	0
Tattnall.....	(1)	(1)	6	0	22	16
Taylor.....	23	17	19	6	20	4
Telfair.....	51	99	5	15	1	1
Terrell.....	133	77	27	8	42	15
Thomas.....			(1)	(1)	0	0
Tift.....	5	4	14	8	2	0
Toombs.....	(1)	(1)	0	0	0	0
Towns.....	10	0	6	0	4	0
Troup.....	(1)	(1)	(1)	(1)		
Turner.....	22	7	4	2	7	3
Twiggs.....	(1)	(1)	(1)	(1)	(1)	(1)
Union.....	0	0	0	0	0	0
Upson.....	13	0	12	0	20	2
Walker.....	2	0	1	0	6	0
Walton.....	27	6	2	0	3	1
Ware.....	0	0	5	2	1	0
Warren.....	3	2	32	46	8	7
Washington.....	18	24			13	17
Wayne.....	23	10	12	16	14	9
Webster.....	8	4	8	0		
Wheeler.....	0	0	(1)	(1)	(1)	(1)
White.....	17	1	(1)	(1)	(1)	(1)
Whitfield.....	40	26	(1)	2	27	13
Wilcox.....	23	27	(1)	(1)		
Wilkes.....	2	3	1	2	10	10
Wilkerson.....	3	9	4	3	(1)	(1)
Worth.....						
Total.....	2,818	2,006	1,491	977	1,580	953

¹ No report.

It is evident that the disease prevails mainly in the southern portion of the State.

TYPES OF INFECTION.

The tertian type of infection prevails. The number of counties in which the types of infection were reported are given in the following table:

Types.	Counties.		
	August.	September.	October.
Tertian.....	33	29	26
Quartan.....	2	3	1
Estivo-autumnal.....	2	3	1
Tertian and quartan.....	9	10	7
Tertian and estivo-autumnal.....	23	19	16
Quartan and estivo-autumnal.....	0	1	1
Tertian, quartan, and estivo-autumnal.....	41	21	37
None.....	0	18	21
Not stated.....	16	3	6
No report.....	22	41	32
Total.....	148	148	148

The number of counties in which the types of infection were reported to have been confirmed microscopically during the three months were as follows:

Types.	Counties.		
	August.	September.	October.
Tertian.....	13	10	10
Quartan.....	2	2	0
Estivo-autumnal.....	6	5	4
Tertian and quartan.....	4	2	3
Tertian and estivo-autumnal.....	11	9	6
Quartan and estivo-autumnal.....	0	0	1
Tertian, quartan, and estivo-autumnal.....	11	1	4
None.....	76	78	78
Not stated.....	3	0	10
No report.....	22	41	32
Total	148	148	148

The counties in which the different types have been reported are shown by symbols in the accompanying map, No. 3.

DIAGNOSIS CONFIRMED MICROSCOPICALLY.

The following table gives the number of physicians who report using the microscope, the number of counties represented, and the number of cases in which the diagnosis was confirmed microscopically, as shown in the reports received each month:

Months.	Physicians.	Counties.	Cases.
August.....	112	50	630
September.....	43	29	252
October.....	47	38	328

CHRONIC MALARIA.

A summary of the reports made of chronic cases of malaria each month is here given:

Months.	Physicians.	Counties.	Cases.
August.....	175	81	668
September.....	82	52	209
October.....	95	63	370

CHILDREN UNDER 15 YEARS OF AGE.

There was a total of 9,825 cases of malaria reported in the State for the three months, of which number 2,586 were reported to have occurred in children under 15 years of age. This represents 26.33 per cent of the total number of cases reported.

MAP NO. 3.—TYPES OF INFECTION REPORTED.



CHILDREN UNDEVELOPED, MENTALLY AND PHYSICALLY.

For the month of August, 73 physicians in 48 counties; for September, 43 physicians in 34 counties; and for October, 51 physicians in 36 counties stated that there were children undeveloped, mentally and physically, on account of chronic malaria.

MOSQUITOES.

The kinds of mosquitoes reported as prevailing in the various counties were as follows:

Kind.	Counties.		
	August.	September.	October.
Anopheles.....	19	14	21
Culex.....	9	6	10
Stegomyia.....	1	1	0
Anopheles and Culex.....	35	17	24
Anopheles and Stegomyia.....	0	1	1
Culex and Stegomyia.....	0	0	0
Anopheles, Culex, and Stegomyia.....	7	1	2
Unknown.....	46	52	40
None.....	7	10	16
Not stated.....	2	5	2
No report.....	22	41	32
	148	148	148

SWAMPS AND POORLY DRAINED LANDS.

Swamps and poorly drained lands were reported to exist in every county in the State except in the counties of Cherokee, Fannin, Hart, Jasper, Towns, Turner, and Upson, from which counties all reports received were negative.

PROPHYLACTIC MEASURES.

Oiling, screening, drainage, quinine, mosquito nets, destruction of breeding places, general sanitation or education were prophylactic measures reported as being in use in some form and to some degree in every county in the State, except in the following:

Baker.	Fayette.	Meriwether.
Burke.	Franklin.	Milton.
Butts.	Gilmer.	Paulding.
Campbell.	Glascok.	Pickens.
Catoosa.	Gordon.	Rabun.
Dawson.	Greene.	Rockdale.
Dekalb.	Hancock.	Schley.
Dodge.	Haralson.	Stephens.
Douglas.	Jasper.	Towns.
Effingham.	Jeff Davis.	Ware.
Elbert.	Lincoln.	Wheeler.
Emanuel.	Madison.	Worth.
Fannin.	Marion.	

AMEBIC DYSENTERY.

REPORT OF A CASE APPARENTLY CURED WITH NEOSALVARSAN.

By GEORGE W. WHEELER, Acting Assistant Surgeon, United States Public Health Service.

The patient was a German 23 years old. His occupation was that of a seaman, and at the time of his application for relief he was a member of the crew of a revenue cutter with headquarters at the port of Wilmington, N. C. His family history showed nothing of

importance. He had had the usual diseases of childhood, from each of which he made an uneventful recovery; otherwise the personal history was negative. Venereal disease in any form was denied.

The present illness began about 7 months ago with attacks of acute diarrhea coming on at varying intervals of from 1 to 2 weeks and lasting about 10 days, with an average of 10 to 15 stools per day. The stools were composed mainly of blood and mucus. There were sharp pains in the lower portion of the abdomen, which became especially marked during the act of defecation. The acute attacks would gradually subside to a certain extent, and during the interval there would be from 2 to 5 soft stools per day with an occasional indefinitely localized pain in the abdominal region.

Patient stated that he had received no treatment excepting occasional doses of lead and opium pills and diarrhea mixtures, which yielded only temporary relief. The trouble gradually grew worse, the acute attacks becoming more frequent and of greater duration, until he was compelled to discontinue his work on account of weakness and discomfort.

Patient was first seen at the out-patient office January 19, 1914, at which time he stated that he was having a stool once in every hour. The physical examination was practically negative. The microscopic examination of a fresh stool showed about 20 grams of what appeared to be about equal parts of bloody fluid, mucus, and fecal material. The microscopic examination showed the presence of numerous amebæ, from 2 to 5 to the high-power field, with the characteristic ameboid movement very marked.

Patient was admitted to the hospital, put to bed, and a soft diet ordered. During the first 24 hours in the hospital he had 14 stools, composed mainly of blood and mucus. At the end of the 24 hours' observation period, 0.9 gram neosalvarsan was given intravenously. No ill effects followed.

During the 24 hours following the administration of neosalvarsan, the patient had 7 soft stools which showed less blood and mucus, but the amebæ were fairly abundant. The subjective symptoms were not so severe, but this change could be explained by the rest in bed and change of diet. During the next 24 hours there were 3 semi-solid stools which showed only traces of blood and mucus and few amebæ. At the end of this period a second dose of neosalvarsan was administered in the same manner as the first, with no ill effects. During the following 24 hours there was one well-formed stool which showed no blood, mucus, or amebæ.

Patient expressed himself as feeling as well as he ever did. He was accordingly allowed to leave his bed and was placed on ordinary diet. The day following he was given light duties about the ward. For

the next three days he had 1 normal stool per day, and showed a decided improvement in his general condition.

On the seventh day after admission he was discharged recovered. He was seen eight days later and reported that, though he had performed hard labor and lived on a rough diet since leaving the hospital, he had not felt the slightest touch of the old trouble. A few days later he deserted, was later captured, and is at present confined in the local jail. He states that he is enjoying perfect health. The information of the prison authorities is to the effect that he is apparently healthy and has made no complaint since his confinement.

While this single case in no way establishes the value of neosalvarsan as a destroyer of this species of protozoan organism, the result obtained certainly invites further trial. I am therefore anxious to report this case, in the hope that others may take advantage of any opportunities to give it a trial, since cases of amebic dysentery in this country are so few that it would take a relatively long time for one observer to acquire sufficient data on which to base a definite conclusion as to its merits.

There is a great need for a more convenient method of treating this disease. The most reliable method we have at present can be carried out only in a hospital with any degree of satisfaction, and then the results are doubtful, unless especial care and persistence are exercised. That this arsenical compound has a very destructive action on another species of the same general class of organisms has been amply demonstrated. There is a reasonable anatomic and pathologic basis for such action in amebic dysentery. The intestinal lesions pass through stages of infiltration, sloughing, and finally undermined granulating ulcers, with the organisms buried deeply in the adjacent tissue. While these deeply placed amebæ are undoubtedly the ones that keep up the trouble, they are also the hardest to affect by the ordinary methods of treatment. They have often been demonstrated in the smaller capillaries in the region of the ulcers, and the fact that the complicating liver abscess is so frequently encountered indicates that there must be some intimate relationship between the organisms and the blood vessels or lymphatics. The question naturally arises whether it would be profitable to use neosalvarsan in the treatment of amebic abscesses.



PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

IN CERTAIN STATES AND CITIES.

SMALLPOX.

Indiana—Evansville.

Surg. Oakley, of the Public Health Service, reported by telegraph that during the week ended March 7, 1914, 6 cases of smallpox had been notified at Evansville, Ind.

Maryland—Baltimore.

Senior Surg. Carter, of the Public Health Service, reported by telegraph that during the period from February 26 to March 6, 1914, 48 cases of smallpox had been notified in Baltimore, Md., making a total of 147 cases reported since January 15, 1914.

Maryland—Colesville and Sellman.

The State Department of Health of Maryland reported by telegraph March 9, 1914, that 7 cases of smallpox had been notified at Colesville, and 3 cases at Sellman, Md.

Maryland—Cumberland, Curtis Bay, and Fairfield.

The State Department of Health of Maryland reported by telegraph March 4, 1914, that smallpox had been notified as follows: One case each at Cumberland, Curtis Bay, and Fairfield, Md.

Minnesota—Duluth.

Acting Asst. Surg. Cheney, of the Public Health Service, reported by telegraph that during the week ended March 7, 1914, 12 cases of smallpox had been notified at Duluth, Minn.

New York—Niagara Falls.

Acting Asst. Surg. Bingham, of the Public Health Service, reported by telegraph that during the week ended March 7, 1914, four cases of smallpox had been notified at Niagara Falls, N. Y.

SMALLPOX—Continued.

Texas—Galveston.

Surg. Bahrenburg, of the Public Health Service, reported by telegraph that smallpox had been notified in Galveston, Tex., as follows: One case March 1, 1 case March 3, 5 cases March 6, and 2 cases March 9, 1914.

Wisconsin.

The December report for the State of Wisconsin published in the Public Health Reports of January 23, 1914, page 183, showed 57 cases in Jefferson County, of which 44 had been vaccinated within seven years preceding the attack, and 13 more than seven years preceding the attack. Correspondence with the Wisconsin State Board of Health has revealed that these figures were in error and that the record for Jefferson County for the month of December, 1913, should read: Four cases of smallpox, of which 3 were reported to the State Board of Health as having been vaccinated "seven years preceding the attack."

Miscellaneous State Reports.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Colorado (Feb. 1-28):			Texas (Jan. 1-31):		
Counties—			Counties—		
Adams.....	1		Austin.....	6	
Crowley.....	4		Bell.....	37	
Denver.....	8		Brooks.....	13	
El Paso.....	2		Dallas.....	84	
Larimer.....	1		Denton.....	4	
Las Animas.....	19		Ellis.....	1	
Logan.....	10		Fisher.....	37	
Prowers.....	2		Fort Bend.....	21	3
Pueblo.....	1		Galveston.....	5	
Weld.....	2		Grayson.....	6	
Total.....	50		Hale.....	6	
			Harrison.....	27	
Florida (Jan. 1-31):			Henderson.....	9	
Counties—			Hill.....	13	
Alachua.....	1		Hunt.....	16	
Bradford.....	1		Irion.....	7	
Dade.....	2		Jim Wells.....	4	
Duval.....	20		Johnson.....	45	
Hillsboro.....	1		Kaufman.....	19	
Lee.....	3		McLennan.....	66	
Manatee.....	1		Navarro.....	4	
Monroe.....	3		Parker.....	1	1
St. John.....	5		Tarrant.....	64	1
Taylor.....	1		Throckmorton.....	5	
Total.....	38		Travis.....	8	
			Van Zandt.....	1	
Oregon (Oct. 1-31):			Total.....	529	5
Counties—					
Coos.....	1		Wyoming (Jan. 1-31):		
Gilliam.....		1	Counties—		
Multnomah.....	10		Albany.....	5	
Polk.....	3		Campbell.....	3	
Umatilla.....	5		Carbon.....	7	
Wasco.....	10		Converse.....	1	
Washington.....	1		Goshen.....	9	
Total.....	30	1	Laramie.....	2	
			Washakie.....	1	
			Total.....	28	

SMALLPOX—Continued.

City Reports for Week Ended Feb. 21, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Aurora, Ill.	1		Los Angeles, Cal.	2	
Austin, Tex.	3		Lynchburg, Va.	2	
Baltimore, Md.	27		Massillon, Ohio.	4	
Chicago, Ill.	1		Milwaukee, Wis.	40	
Cincinnati, Ohio.	2		Muscatine, Iowa.	5	
Columbus, Ohio.	14		Nashville, Tenn.	27	
Dayton, Ohio.	4		New Orleans, La.	1	
Detroit, Mich.	4		Niagara Falls, N. Y.	25	
Evansville, Ind.	17		Philadelphia, Pa.	1	
Harrisburg, Pa.	2		Racine, Wis.	1	
Hartford, Conn.	1		Roanoke, Va.	1	
Knoxville, Tenn.	14		St. Louis, Mo.	2	
La Crosse, Wis.	5		Toledo, Ohio.	22	
Lexington, Ky.	6		Washington, D. C.	4	
Little Rock, Ark.	5		Zanesville, Ohio.	2	

TYPHOID FEVER.

City Reports for Week Ended Feb. 21, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Austin, Tex.		1	Montclair, N. J.	1	
Baltimore, Md.	3	2	Nanticoke, Pa.	1	
Boston, Mass.	7	4	Newton, Mass.		1
Chicago, Ill.	16	2	Oakland, Cal.	4	
Cincinnati, Ohio.	1		Philadelphia, Pa.	21	2
Cleveland, Ohio.	10		Pittsburgh, Pa.	6	
Columbus, Ohio.	2		Providence, R. I.	1	
Cumberland, Ohio.	1		Reading, Pa.	2	
Dunkirk, N. Y.	1		Roanoke, Va.	1	
Elmira, N. Y.	1		Saginaw, Mich.	3	
Evansville, Ind.	1	1	St. Joseph, Mo.	1	
Fall River, Mass.	1		St. Louis, Mo.	8	1
Grand Rapids, Mich.	4	2	San Diego, Cal.	1	
La Crosse, Wis.		1	Springfield, Ill.		1
Los Angeles, Cal.	8		Trenton, N. J.	1	
Lowell, Mass.	2		Washington, D. C.	6	2
Malden, Mass.	1		Wheeling, W. Va.	1	
Manchester, N. H.	1		Zanesville, Ohio.	1	
Milwaukee, Wis.	3				

CEREBROSPINAL MENINGITIS.

Port of New York Quarantine.

The health officer of the port of New York reported by telegraph March 4, 1914, that the steamship *Athinai*, which arrived at the port of New York February 28, had on board 4 cases of cerebrospinal meningitis, and that another case had developed March 4 among 480 contacts detained in quarantine. Bills of health of the vessel reported the presence of the disease at Patras, Kalamaca, and Mis-soulonghi.

City Reports for Week Ended Feb. 21, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Boston, Mass.	1	1	Manchester, N. H.	1	1
Chicago, Ill.	1	1	Nashville, Tenn.	2	2
Cincinnati, Ohio.		1	New Bedford, Mass.	1	
Cleveland, Ohio.	2	1	St. Louis, Mo.	1	1
Cumberland, Md.	1		Yonkers, N. Y.	1	
Los Angeles, Cal.	2				

POLIOMYELITIS (INFANTILE PARALYSIS).**City Reports for Week Ended Feb. 21, 1914.**

During the week ended February 21, 1914, 1 case of poliomyelitis was notified at Fall River, Mass., and a fatal case of the disease was notified during the same period at Grand Rapids, Mich.

ERYSIPELAS.**City Reports for Week Ended Feb. 21, 1914.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md.		1	Los Angeles, Cal.	3	
Binghamton, N. Y.	1		Milwaukee, Wis.	1	1
Boston, Mass.		2	Muscatine, Iowa.	1	
Chicago, Ill.	8	1	Newark, N. J.		3
Cincinnati, Ohio.	1		Philadelphia, Pa.	17	
Cleveland, Ohio.	4		Pittsburgh, Pa.	9	1
Dayton, Ohio.	1		Reading, Pa.	1	
Harrisburg, Pa.	1		St. Louis, Mo.	9	1
Hartford, Conn.	1		Taunton, Mass.	2	2
Johnstown, Pa.	1		Wilkes-Barre, Pa.	1	
Lancaster, Pa.	1		Yonkers, N. Y.	1	
Lexington, Ky.		1			

PELLAGRA.

During the week ended February 21, 1914, pellagra was notified by cities as follows: Nashville, Tenn., 1 case; New Orleans, La., 2 cases.

PLAGUE.**California—Squirrels Collected and Examined.**

During the week ended February 14, 1914, 17 ground squirrels from Alameda County and 1 squirrel from San Francisco were examined for plague infection. None was found plague infected.

Washington—Seattle—Plague Rat Found.

Surg. Lloyd, of the Public Health Service, reported by telegraph that a plague-infected rat was found at Seattle, March 1, 1914.

Rats Collected and Examined.

Places.	Week ended—	Found dead.	Total collected.	Examined.	Found infected.
California:					
Cities—					
Oakland	Feb. 14, 1914	32	640	500	
Berkeley	do.		156	110	
San Francisco	do.	5	1,297	1,027	
Washington:					
City—					
Seattle	do.		1,143	914	

PNEUMONIA.

City Reports for Week Ended Feb. 21, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Ann Arbor, Mich.....	5	.....	New Castle, Pa.....	1	.....
Auburn, N. Y.....	1	.....	New Orleans, La.....	.....	12
Binghamton, N. Y.....	7	3	Norristown, Pa.....	1	6
Braddock, Pa.....	2	.....	Philadelphia, Pa.....	58	75
Chicago, Ill.....	183	138	Pittsburgh, Pa.....	33	51
Cleveland, Ohio.....	39	15	Pittsfield, Mass.....	5	.....
Elmira, N. Y.....	1	1	Reading, Pa.....	1	4
Erie, Pa.....	1	.....	San Diego, Cal.....	1	1
Galesburg, Ill.....	1	2	Schenectady, N. Y.....	4	3
Grand Rapids, Mich.....	2	4	South Bethlehem, Pa.....	3	1
Harrisburg, Pa.....	1	4	Steelton, Pa.....	1	1
Lancaster, Pa.....	1	.....	Wilmington, N. C.....	6	4
Los Angeles, Cal.....	10	8	York, Pa.....	1	.....
Manchester, N. H.....	3	.....		

RABIES.

California—Berkeley, Oakland, and San Francisco—Rabies in Animals.

Surg. Long, of the Public Health Service, reported by telegraph that during the week ended March 7, 1914, rabies in animals had been reported as follows: Berkeley, 1 case in a dog; Oakland, 4 cases in dogs; San Francisco, 1 case in a dog and 1 in a horse.

Washington—Seattle—Rabies in Animals.

Surg. Lloyd, of the Public Health Service, reported by telegraph that during the week ended March 7, 1914, 6 cases of rabies in dogs had been reported in Seattle, Wash.

TETANUS.

City Reports for Week Ended Feb. 21, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Dayton, Ohio.....	.....	1	Pottstown, Pa.....	.....	1
Philadelphia, Pa.....	1	.....	St. Louis, Mo.....	.....	1
Pittsburgh, Pa.....	.....	1	Wilmington, N. C.....	.....	1

TYPHUS FEVER.

New York—Ellis Island.

Surg. Sprague, of the Public Health Service, reported by telegraph that on March 8, 1914, a case of typhus fever had been detected at Ellis Island Immigration Station in an Armenian immigrant from the steamship *La Savoie*, from Havre.

TYPHUS FEVER—Continued.

Port of New York Quarantine.

The health officer of the port of New York reported by telegraph that a death from typhus fever had occurred on board the steamship *Pannonia* on the morning of March 4, 1914. The vessel arrived at New York quarantine in the afternoon of March 4 via Trieste, Patras, and Palermo. The report stated that 236 contacts had been removed to quarantine.

Rhode Island—Providence.

During the week ended February 21, 1914, a case of typhus fever was notified at Providence, R. I.

SCARLET FEVER, MEASLES, DIPHTHERIA, AND TUBERCULOSIS.

Pennsylvania—Pittsburgh—Scarlet Fever.

Surg. Stoner, of the Public Health Service, reported by telegraph that during the 2 weeks ended March 7, 1914, 212 cases of scarlet fever, with 3 deaths, had been notified at Pittsburgh, Pa., making a total of 2,477 cases, with 121 deaths, reported since the beginning of the outbreak August 1, 1913.

City Reports for Week Ended Feb. 21, 1914.

Cities.	Popula- tion, United States census 1910.	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tuber- culosis.		
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
Over 500,000 inhabitants:											
Baltimore, Md.	558,485	200	28	2	16	1	18		20	34	
Boston, Mass.	670,585	260	61	5	56		123	1	46	24	
Chicago, Ill.	2,185,283	778	124	20	61	2	106	12	153	87	
Cleveland, Ohio.	560,663	185	59	6	50	1	12	2	29	19	
Philadelphia, Pa.	1,549,008	492	51	6	158	1	60	5	97	44	
Pittsburgh, Pa.	533,905	203	26	2	34	1	102	9	27	15	
St. Louis, Mo.	687,029	238	60	4	128	1	31	3	50	18	
From 300,000 to 500,000 inhab- itants:											
Cincinnati, Ohio.	364,463	146	32	5	2		6		21	20	
Detroit, Mich.	465,766		65	7			27	2			
Los Angeles, Cal.	319,198	118	8	1	2		10		39	27	
Milwaukee, Wis.	373,857	119	18	2	68	1	25	2	14	19	
Newark, N. J.	347,469	148	33	3	406	4	60	2	19	18	
New Orleans, La.	339,075	161	25	1	18		4		39	31	
Washington, D. C.	331,069	140	25		68		12		11	12	
From 200,000 to 300,000 inhab- itants:											
Jersey City, N. J.	267,779	78		2						13	
Providence, R. I.	224,326	85	19	2	13	1	8		5	12	
From 100,000 to 200,000 inhab- itants:											
Bridgeport, Conn.	102,054	34	7	1	47	4	5	1	6	1	
Cambridge, Mass.	104,839	37	5		23	1	8		4	5	
Columbus, Ohio.	181,548	60	5		19		3		4	5	
Dayton, Ohio.	116,577	39	11	2	91		6		1	7	
Fall River, Mass.	119,295	38	8	1			12	1	8	5	
Grand Rapids, Mich.	112,571	50	3		93		18	3	3	9	
Lowell, Mass.	106,294	46	7	1	15		2		5	2	
Nashville, Tenn.	110,364	55	1		3		1		2		
Oakland, Cal.	150,174	40	10				6		11	7	
Toledo, Ohio.	168,497	69	3	2	1		2		103	7	
Worcester, Mass.	145,986	60	7		13		3	1	7	3	

SCARLET FEVER, MEASLES, DIPHTHERIA, AND TUBERCULOSIS—Con.

City Reports for Week Ended Feb. 21, 1914—Continued.

Cities.	Popula- tion, United States census 1910.	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Less than 25,000 inhabitants:										
Alameda, Cal.	23,383	3								1
Ann Arbor, Mich.	14,817	10	3		1		1		6	
Beaver Falls, Pa.	12,191		1				2			
Braddock, Pa.	19,357		3		2		3			
Cambridge, Ohio.	11,327	3			1		1			
Clinton, Mass.	13,075	6					3		1	1
Coffeyville, Kans.	12,687				31					
Columbus, Ind.	8,813	30			30					
Concord, N. H.	21,497	12	1						1	
Cumberland, Md.	21,839	12	7	1			9		1	1
Dunkirk, N. Y.	17,221	13			6					
Galesburg, Ill.	22,089	9	1						1	1
Harrison, N. J.	14,498	6	1		4		2		1	
Kearny, N. J.	18,659	8	1		5				1	
Massillon, Ohio.	13,879	3					1			
Medford, Mass.	23,150	10	1		1		5			
Melrose, Mass.	15,715	7					4			
Moline, Ill.	24,199	6	1							
Montclair, N. J.	21,550	4			30		2		1	
Morristown, N. J.	12,507	5			2					
Muscatine, Iowa.	16,178	2			1					
Nanticoke, Pa.	18,877	6	2	1	3		2			
Newburyport, Mass.	14,949	10		1					1	
North Adams, Mass.	22,019	7	2		1					1
Northampton, Mass.	19,431	16			1				2	
Palmer, Mass.	8,610	8								2
Plainfield, N. J.	20,550	13			9		2		11	
Portsmouth, N. H.	11,269		1		1					
Pottstown, Pa.	15,599	8		1			2			1
Rutland, Vt.	13,546	5	1				2			
South Bethlehem, Pa.	19,973	5			6				1	2
Steelton, Pa.	14,246	2								
Wilkinsburg, Pa.	18,924	8					3		2	
Woburn, Mass.	15,308	2								

IN INSULAR POSSESSIONS.

HAWAII.

Plague-Infected Rat Found.

A report from the Hilo bacteriological laboratory shows that a plague-infected rat was found January 30, 1914, at Pacific Sugar Mill.

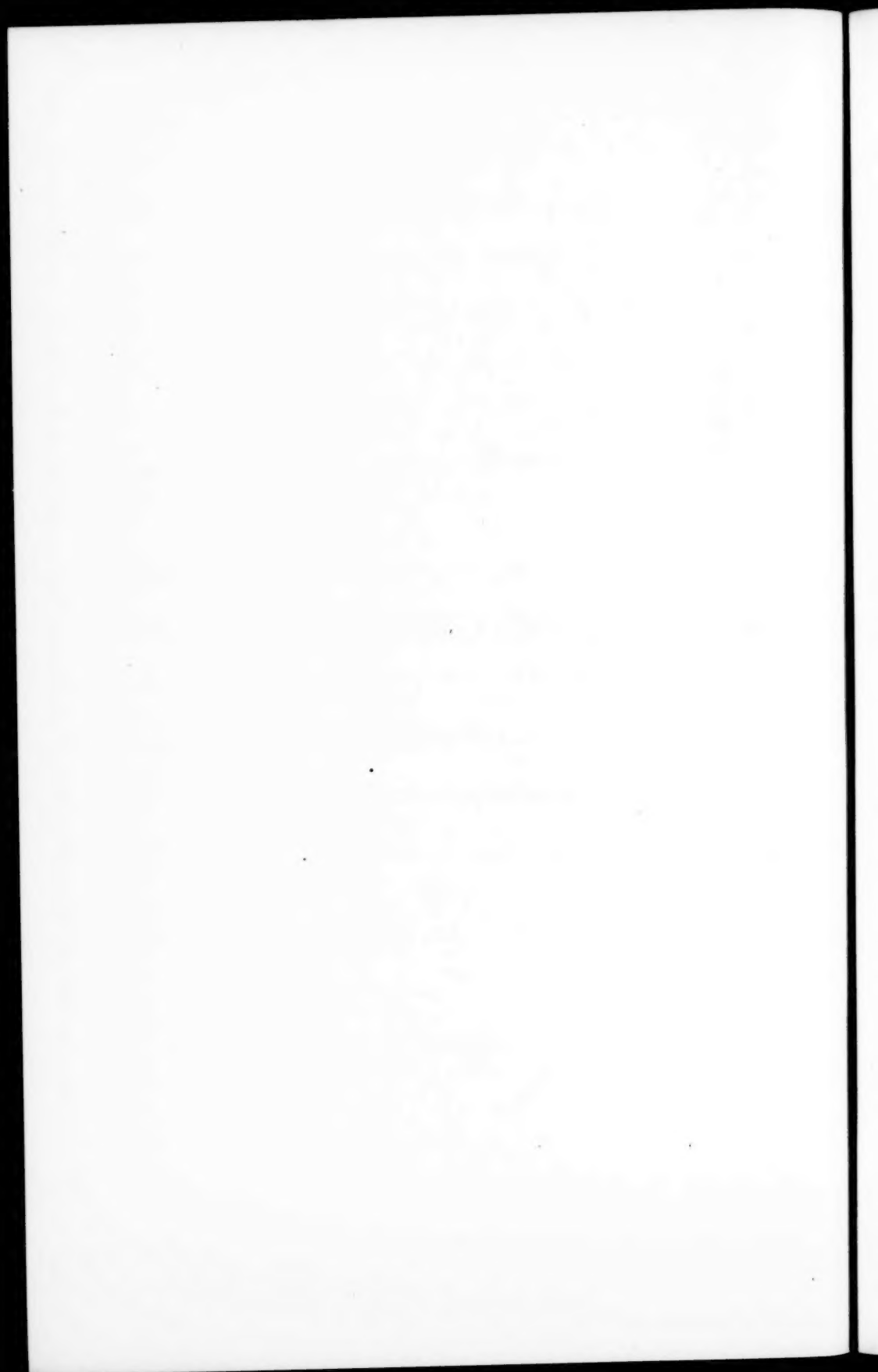
Examination of Rats and Mongoose.

Rats and mongoose have been examined in Hawaii as follows:
Week ended February 14, 1914—Honolulu, 334; Hilo, 2,203.

PORTO RICO.

Examination of Rats and Mongoose.

During the two weeks ended February 27, 1914, 1,120 rats, 490 mice, and 6 mongoose were examined in Porto Rico for plague infection. No plague-infected animal was found.



FOREIGN REPORTS.

CEYLON.

Plague.

During the week ended January 31, 1914, 3 fatal cases of plague were notified at Colombo and 1 case at Kandy, Ceylon. The type of the disease was septicemic.

CHINA.

Plague—Examination of Rats—Hongkong.

During the week ended January 17, 1914, 7 cases of plague with 6 deaths were notified at Hongkong.

During the same period 2,380 rats were examined at Hongkong for plague infection. None was found plague infected.

Plague-Infected Rats—Shanghai.

During the week ended January 31, 1914, 172 rats were examined at Shanghai for plague infection. Of this number, 7 rats were found infected.

During the month of December, 1913, 489 rats were examined in the French concession at Shanghai. Eight rats were found plague infected.

CUBA.

Plague—Habana.

From March 5 to 9, 1914, two cases of plague were notified at Habana, Cuba.

EGYPT.

Plague.

A case of plague was notified February 13, 1914, at Cairo and a case at Alexandria February 19, 1914.

GREECE.

Smallpox—Piræus.

During the two weeks ended February 12, 1914, 9 cases of smallpox with 6 deaths were notified at Piræus, Greece.

GUADELOUPE.**Smallpox on Vessel.**

The steamship *Perou* from Havre via Bordeaux and Santander, arrived February 16, 1914, at Guadeloupe with 10 cases of smallpox on board among French colonial troops. The patients were removed to the quarantine station on the island of Cassou.

JAVA.**Status of Plague.**

Plague has been notified in East Java as follows:

MONTH OF DECEMBER, 1913.

Districts.	Cases.	Deaths.
Kediri.....	240	213
Madioen.....	62	59
Malang.....	730	606
Surabaya.....	33	31
Total.....	1,065	999

The total number of cases of plague notified in East Java during the year ended December 31, 1913, was 11,218, with 10,556 deaths.

PERU.**Status of Plague.**

Plague has been notified in Peru as follows:

JAN. 25-FEB. 8, 1914.

Places.	New cases.	Remain- ing.	Places.	New cases.	Remain- ing.
Callao.....	2	1	Lima (city).....	20	3
Chiclayo.....	15	13	Lima (country).....	6	4
Casma.....	(1)		Mollendo.....	3	2
Catacaos.....	(1)		Pacasmayo.....	2	
Contumaza.....	(1)		Piura.....	(1)	
Ferrenaje.....	3	1	San Pedro.....	4	6
Guadalupe.....	8	4	Trujillo.....	20	27

¹ Present.

SOUTHERN NIGERIA.**Yellow Fever—Lagos.**

Yellow fever was reported present at Lagos, Southern Nigeria, February 26, 1914.

VENEZUELA.

Maritime Quarantine—Rat Guard.

The following supplement to the maritime quarantine regulations of Venezuela, issued by the national sanitary officer of Venezuela, was forwarded February 16, 1914, by Acting Ass. Surg. Stewart, at La Guaira:

[Translation.]

ARTICLE 1. The competent authorities of the ports of the Republic will impose on the captains of vessels located in the ports of their jurisdiction, from their arrival until their departure, the use of apparatus to impede the passage of rats after models approved by the national sanitary office on the chains of the anchors and on all the mooring lines.

ART. 2. After 6 o'clock in the evening connections between the ships and the docks can not exist, and the former must be separated from the latter by not less than a distance of 5 meters (16.4 feet). In the cases where it may be necessary to diminish this distance, all connection with the land will be immediately suspended after the termination of the service which was the motive for the approach, and the vessel will retire from the dock the distance above mentioned.

ART. 3. The failure to comply with the present regulations will be punished by fines of from 100 to 200 bolivares (\$19.30 to \$96.50), or proportional arrest. For the effectiveness of these penalties the respective agents or consignees will be responsible.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

Reports Received During Week Ended Mar. 13, 1914.

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
Dutch East Indies:				
Batavia.....	Jan. 18-24.....	1	1	
India:				
Bombay.....	Jan. 26-Feb. 1....	2	2	
Siam:				
Bangkok.....	Jan. 18-24.....		21	
Straits Settlements:				
Singapore.....	Jan. 11-17.....	1		
Turkey in Europe:				
Constantinople.....	Feb. 15.....		1	

YELLOW FEVER.

Southern Nigeria:				
Lagos.....	Dec. 24-28.....	2		Including previous report.
Do.....	Feb. 26.....			Present.

PLAGUE.

Ceylon:				
Colombo.....	Jan. 25-31.....	3	3	Septicemic.
Kandy.....	do.....	1		From Colombo. Also septicemic.
Chile:				
Iquique.....	Jan. 11-31.....	3	3	
Cuba:				
Habana.....	Mar. 5-9.....	2		
Dutch East Indies:				
Java.....				Total in East Java, year 1913: Cases 11,218, deaths 10,556.
Kediri.....	Dec. 1-31.....	210	213	
Madison.....	do.....	62	59	
Malang.....	do.....	730	696	
Surabaya.....	do.....	33	31	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received During Week Ended Mar. 13, 1914—Continued.****PLAGUE—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Egypt:				Jan. 1-Feb. 18: Cases 15, deaths 7.
Alexandria	Feb. 18.	1		
Cairo	Feb. 13.	1		
Port Said	Feb. 10.	2	2	
Fayoum, department	do.	1		
India:				
Bombay	Jan. 26-Feb. 1.	19	19	
Karachi	Jan. 25-31.	1		Deaths not reported.
Peru:				Present.
Ancachs—				
Casma	Jan. 25-Feb. 8.			
Arequipa—				
Mollendo	do.	3		
Cajamarca—				Do.
Contumaza	do.			
Callao—				
Callao	do.	2		
Lambayeque—				
Chiclayo	do.	15		
Ferreñaje	do.	3		
Pacasmayo	do.	2		
Libertad—				
Guadalupe	do.	8		
San Pedro	do.	4		
Trujillo	do.	30		
Lima	do.	6		
Lima	do.	20		
Piura—				Do.
Catacaos				Do.
Piura				
Mauritius:	Dec. 26-Jan. 8.	11	4	
Russia: ¹				
Saratov	Feb. 11.	1		
Siam:				
Bangkok	Jan. 18-21.		6	

SMALLPOX.

Arabia:				
Aden	Jan. 28-Feb. 2.		1	
Austria-Hungary:				
Coastland—				
Trieste	Jan. 25-31.	3		
Lower Austria—				
Vienna	Jan. 18-24.	5		
Moravia	Jan. 18-31.	2		
Brazil:	Jan. 25-Feb. 14.		8	
Para:				
Canal Zone:				Nov. 1-30, Santo Tomas hospital, 1 case from a vessel from Callao.
Panama				
Canada:				
Montreal	Feb. 22-28.	8		
Ontario	Feb. 24-Mar. 2.	1		
Ottawa	Feb. 16-28.	7		
Toronto	Feb. 8-14.		1	
Winnipeg	Feb. 14-21.	1		
China:				
Dairen	Jan. 4-17.	2		
Shanghai	Jan. 19-Feb. 1.	2	1	
Dutch East Indies: ¹				Jan. 18-24, 60 cases with 20 deaths in the western part, and 20 cases with 15 deaths in the interior.
Java				
Batavia	Jan. 11-17.	15	10	
Besoeki	Oct. 19-29.	227	47	
Madioen	Oct. 19-28.	36	12	
Surakarta	Oct. 19-Dec. 6.	481	91	
Egypt:				
Alexandria	Feb. 5-11.	1		
Cairo	Jan. 30-Feb. 4.	35	41	

¹ From the Veröffentlichungen des Kaiserlichen Gesundheitsamtes, Feb. 18, 1914.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received During Week Ended Mar. 13, 1914—Continued.

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
France:				
Marseille.....	Jan. 1-31.....	.....	26	
Nantes.....	Feb. 8-14.....	1	.....
Germany.....				Total Feb. 8-14: Cases, 3.
Berlin.....	Feb. 8-14.....	2	.....
Bremen.....	do.....	1	.....
Great Britain:				
Cardiff.....	Feb. 16-21.....	1	.....
London.....	Feb. 8-14.....	1	.....
Greece.....	Jan. 28-Feb. 12.....	.....	.....	Present in the barracks at Athens and in the surrounding country.
Piræus.....	do.....	9	6	
Guadeloupe:				
Pointe à Pitre quarantine station, Islet à Cassou.	Feb. 16-23.....	10	1	From among returned troops from s. s. Perou from Havre, via Bordeaux and Santander.
India:				
Bombay.....	Jan. 18-Feb. 1.....	19	6	
Calcutta.....	Jan. 11-17.....	.....	4	
Karachi.....	Jan. 25-31.....	1	.....
Madras.....	Jan. 18-31.....	4	1	
Japan:				
Nagasaki.....	.....	.....	.....	Jan. 27-Feb. 8, 1 fatal case.
Mexico:				
Acapulco.....	Feb. 1-7.....	.....	1	
Aguascalientes.....	Feb. 9-22.....	.....	15	
Juarez.....	Feb. 15-28.....	.....	4	
La Paz.....	Jan. 16-22.....	3	1	
Monterey.....	Feb. 9-15.....	1	.....
Vera Cruz.....	Feb. 15-21.....	7	1	
Netherlands, The.....	Feb. 8-14.....	1	1	
Russia:				
St. Petersburg.....	Jan. 25-31.....	3	1	
Moscow.....	Jan. 18-31.....	7	.....
Turkey in Europe:				
Constantinople.....	Feb. 8-14.....	.....	1	

Reports Received from Dec. 27, 1913, to Mar. 6, 1914.

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary:				
Bosnia-Herzegovina—				
Brod.....	Nov. 13-18.....	2	.....
Kostjnice.....	do.....	1	.....
Novigrad.....	Oct. 26-Nov. 5.....	1	.....
Sjekocac.....	Nov. 6.....	1	.....
Travnik, district.....	Dec. 10-16.....	6	.....
Vranduk.....	Nov. 20.....	1	.....
Zenica.....	Oct. 20-Nov. 19.....	9	2	
Croatia-Slavonia—				
Pozenga.....	Nov. 18-Dec. 1.....	2	.....
Syrmien—				
Adasevci.....	do.....	6	2	
Semlin.....	do.....	1	1	
Vitrovia—				
Dobrovic.....	do.....	2	2	
Hungary.....				Total, Sept. 1-Dec. 29: Cases, 729; deaths, 372; Dec. 29, free.
Bacs-Bodrog, district.....	Nov. 9-Dec. 29.....	52	31	
Jasz-Nagy-Kun-Szolnok—				
Szolnok.....	Nov. 9-15.....	2	2	
Maramaros.....	Nov. 30-Dec. 6.....	1	1	
Pest Pilis—				
Soroksar.....	Nov. 9-22.....	2	1	
Szabolcs—				
Nyiregyhaza.....	Nov. 9-15.....	1	1	
Temes—				
Varasiget.....	do.....	.....	1	
Torontal.....	Nov. 9-Dec. 13.....	27	19	
Ung—				
Jassa.....	Nov. 9-15.....	1	1	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from Dec. 27, 1913, to Mar. 6, 1914—Continued.****CHOLERA—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo.....	Nov. 9-Jan. 17....	33	19	
China:				
Hongkong.....	Nov. 9-Dec. 20....	4	.....
Dutch East Indies:				
Java—				
Batavia and Tanjong	Nov. 9-Dec. 27....	45	34	
Priok.....				
Samarang.....	Nov. 30-Dec. 27....	47	25	
Sumatra—				
Padang.....	Dec. 1-13.....	11	11	
India:				
Bombay.....	Nov. 10-Jan. 24....	16	7	
Calcutta.....	Nov. 9-Jan. 17....	.....	457	
Madras.....	Nov. 16-Jan. 24....	6	4	
Negapatam.....	Jan. 4-10.....	.....	7	
Rangoon.....	Nov. 1-30.....	3	2	
Indo China:				
Saigon.....	Jan. 13-19.....	1	.....
Philippine Islands:				
Manila.....	Nov. 9-Jan. 24....	69	48	Total, Aug. 23-Jan. 24: Cases 186, deaths 124. Third quarter, 1913: Cases 14, deaths 6. Jan. 3, 1 fatal case on s. s. Sigismund from Rabal, New Guinea. At the necropsy pathological lesions of cholera and beriberi were found.
Provinces.....				Total, Aug. 23-Dec. 27: Cases 148, deaths 94.
Bulacan—				
Bulacan.....	Dec. 14-20.....	.....	.....	Present in vicinity.
Meycauayan.....	.....do.....	.....	.....	Present.
Capiz.....	.....do.....	.....	.....	Total, Dec. 17-23: Cases, 26; deaths, 18.
Banga.....	Dec. 17-20.....	.....	.....	Present.
Calvo.....	Dec. 17-Jan. 24....	.....	.....	1 death daily.
Capiz.....	Jan. 28.....	.....	.....	Present.
New Washington..	.....do.....	.....	.....	Do.
Cavite—				
Santa Cruz.....	Nov. 13-19.....	.....	.....	Do.
Cebu—				
Cebu.....	.....do.....	.....	.....	Do.
Opon.....	Nov. 19.....	1	.....	On Maetan Island.
Pampanga.....	Dec. 27-Jan. 28....	.....	.....	Present in Guagua, Macabebe, San Fernando, and other places.
Pangasinan.....	Dec. 19-29.....	.....	.....	Present in Dagupan, Lingayen, San Carlos, and Urdaneta.
Rizal—				
Las Pinas.....	.....do.....	1	.....	Present.
Pasig.....	Nov. 19.....	.....	.....	Do.
Pateros.....	Jan. 28.....	.....	.....	Do.
Rizal.....	.....do.....	.....	.....	Total, Nov. 14 to Dec. 7: Cases, 18; deaths, 15.
Roumania.....				
Russia:				
Bessarabia—				
Ismail.....	Oct. 26-Nov. 8....	6	1	
Ekatrinoslav.....	.....do.....	1	.....
Kherson.....	.....do.....	6	9	
Taurida—				
Dnelper district..	.....do.....	1	2	
Servia.....				Nov. 10-24, 8 cases with 2 deaths in the districts Podrigne and Pojarevatz.
Siam:				
Bangkok.....	Nov. 2-Dec. 29....	.....	78	
Straits Settlements:				
Singapore.....	Nov. 2-Jan. 10....	18	17	
Turkey in Asia:				
Alvill.....	Jan. 10-23.....	9	6	
Beirut.....	Dec. 23.....	2	1	From among troops on the s. s. Bahr Amer from Rodosto.
Smyrna.....	Dec. 16-Jan. 8....	11	4	
Trebizond.....	Dec. 9-Jan. 24....	22	16	Dec. 9-16, 6 cases among troops from s. s. Guldjemal. Jan. 17, 1 case in the city.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from Dec. 27, 1913, to Mar. 6, 1914—Continued.****CHOLERA—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Turkey in Europe:				
Constantinople.....	Nov. 25-Feb. 8....	141	55	Total Aug. 2-Feb. 8: Cases, 216; deaths, 95.
Dardanelles.....	Jan. 9-20.....	10	9	
Gallipoli.....	Jan. 1-3.....	2	2	
Pera.....	Jan. 3-10.....	5	.....
Rodosto.....	Dec. 21-Jan. 9....	22	.....

YELLOW FEVER.

Brazil:				
Bahia.....	Nov. 23-Jan. 31...	5	7	
Ceara.....	Nov. 1-30.....	.....	2	
Ecuador:				
Guayaquil.....	Nov. 1-Dec. 31...	9	6	
Mitagro.....	do.....	2	1	
Naranjito.....	do.....	3	2	
Mexico:				
Merida.....	Dec. 10-11.....	1	1	From Campeche.
Do.....	Jan. 4-10.....	1	1	Do.
Southern Nigeria:				
Lagos.....	Oct. 20-28.....	3	1	Among Europeans from a vessel. Including previous report. Dec. 28, 1 case from a vessel.
Togo:				
Lome.....	Sept. 12.....	1	.....
Trinidad:				
Brighton.....	Dec. 30.....	1	.....	Total Nov. 22-Dec. 30: Cases, 10; deaths, 3, including previous reports.

PLAGUE.

Australia:				
Thursday Island Quarantine station.	May 21.....	5	.....	Pestis minor from 's. s. Taynan from Hongkong to Townville.
Azores:				
Terceira—				
Angra-Heroismo.....	Dec. 21.....	.....	1	
Brazil:				
Bahia.....	Nov. 23-Jan. 31...	21	7	
Pernambuco.....	Dec. 16-31.....	.....	1	
Do.....	Jan. 1-15.....	.....	1	
Rio de Janeiro.....	Nov. 16-22.....	1	1	
British East Africa:				
Kisumu.....	Sept. 12-Oct. 13...	2	2	
Mombasa.....	Sept. 12-Dec. 15...	31	16	
Nairobi.....	Sept. 12-Nov. 15...	3	3	
Chile:				
Iquique.....	Nov. 9-Jan. 4....	15	6	
China:				
Hongkong.....	Nov. 2-Jan. 17....	41	38	
Shanghai.....	Oct. 1-7.....	1	.....
Dutch East Indies:				
Provinces—				
Kediri.....	Nov. 1-30.....	307	268	
Madison.....	do.....	89	81	
Malang.....	do.....	820	770	
Surabaya.....	do.....	60	64	
Ecuador:				
Babahoyo.....	do.....	1	.....
Duran.....	Dec. 1-31.....	1	.....
Guayaquil.....	Nov. 1-Dec. 31...	349	157	
Manta.....	Dec. 1-31.....	8	.....
Mitagro.....	Nov. 1-Dec. 31...	2	1	
Naranjito.....	do.....	3	1	
Yaguachi.....	Nov. 1-30.....	2	2	
Egypt.....				Jan. 1-Dec. 24, 1913: Cases, 654; deaths, 304. Jan. 1-15: Cases, 6; deaths, 4.
Provinces—				
Assiout.....	Jan. 5.....	1	1	
Assouan.....	Dec. 10.....	1	.....
Do.....	Jan. 5.....	1	1	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from Dec. 27, 1913, to Mar. 6, 1914—Continued.****PLAGUE—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Egypt—Continued.				
Provinces—Continued.				
Garbieh.....	Dec. 11.....	1	.....
Do.....	Jan. 15-17.....	7	2	
Minieh.....	Dec. 9-21.....	3	1	
Do.....	Jan. 8-29.....	2	2	
India.....				Total Jan. 1, 1913-Jan. 3, 1914: Cases, 238,198; deaths, 198,875.
Bombay.....	Nov. 9-Jan. 24.....	75	60	
Calcutta.....	Nov. 2-Dec. 13.....	.....	11	
Karachi.....	Nov. 9-Jan. 24.....	155	155	
Madras.....	Nov. 16-Dec. 20.....	4	2	
Rangoon.....	Oct. 26-Nov. 30.....	26	25	
Indo-China.....				Total Jan. 1-Nov. 20: Cases, 3,665; deaths, 3,465.
Saigon.....	Nov. 11-Jan. 19.....	11	.....
Japan.....				Total, Jan. 1-Dec. 31: Cases, 27; deaths, 20; exclusive of Taiwan.
Kobe.....	Dec. 1-7.....	1	.....
Yokohama.....	Jan. 4-10.....	1	.....	Total Sept. 19-Jan. 10: Cases, 22; deaths, 17.
Mauritius.....	Oct. 26-Dec. 18.....	71	50	Total Jan. 1-Nov. 27: Cases, 273; deaths, 163.
Morocco:				
Casablanca.....	Jan. 7.....	1	1	
El-Araish (Larache).....	Sept. 17.....	1	.....	Among the military.
New Caledonia:				
Bourail.....	Sept. 1-Oct. 11.....	8	2	In a school of the tribe of the Azaren.
Peru:				
Ancachs—				
Casma.....	Dec. 1-Jan. 18.....	.....	.....	Present.
Nepena.....	do.....	.....	.....	Do.
Arequipa—				
Mollendo.....	Dec. 1-Jan. 24.....	8	.....
Cajamarca—				
Contumaza.....	Jan. 19-24.....	12	.....
Callao—				
Callao.....	do.....	2	.....
Lambayeque—				
Chiclayo.....	Dec. 1-Jan. 24.....	52	.....
Ferrenaje.....	do.....	15	.....
Guadalupe.....	do.....	.....	.....	Present.
Libertad.....				Feb. 1: 1 case in Salaverry.
San Pedro.....	Dec. 1-Jan. 24.....	30	.....
Trujillo.....	do.....	54	.....
Lima.....	Dec. 1-Jan. 18.....	6	.....
Lima.....	Dec. 1-Jan. 24.....	29	.....
Pisco.....	Dec. 1-Jan. 18.....	2	.....
Monsefu.....	do.....	2	.....
Piura—				
Catacaos.....	Dec. 1-Jan. 24.....	12	.....
Piura.....	do.....	10	.....
Philippine Islands:				
Manila.....	Nov. 23-Jan. 24.....	3	2	Third quarter, 1913: Cases, 2; deaths, 1.
Russia:				
Ural, territory.....				Total Oct. 20-Nov. 10: Cases, 212; deaths, 179; and 2 fatal cases from Issum Tube.
Djakisabevsk district—				
Djumarta.....	Nov. 9-10.....	5	1	
Djantayu.....	Nov. 8-10.....	2	2	
Kizilu.....	Nov. 8.....	1	1	
Fourteenth village.....	Nov. 7-9.....	6	.....
Sarbas.....	Nov. 8-10.....	13	7	
Kaziljar district.....	Nov. 5-10.....	39	24	In Assaukurt, Baitechurek, Bis- kuduk, and Djamankuduk.
Lbistchensky district—				
Issum Tube.....	Oct. 20-Nov. 10.....	138	127	
Kalmikov.....	Nov. 4-10.....	6	6	
Siam:				
Bangkok.....	Nov. 2-29.....	.....	1	
Tripoli:				
Bengazi.....	Jan. 31.....	.....	.....	Present.
Turkey in Asia:				
Beirut.....	Dec. 10-23.....	2	2	
Jiddah.....	Feb. 2.....	1	.....
Zanzibar.....	Dec. 31-Jan. 2.....	1	1	On s. s. President from Dar-es- Salaam.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from Dec. 27, 1913, to Mar. 6, 1914—Continued.****SMALLPOX.**

Places.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Departments—				
Algiers.....	Sept. 1-Nov. 30...	8		
Constantine.....	Oct. 1-Nov. 30...	14		
Oran.....	Sept. 1-Nov. 30...	174		
Arabia:				
Aden.....	Nov. 25-Dec. 15...	5	4	
Maskat.....	Nov. 30-Dec. 6...	10		Dec. 20, present.
Matarah.....	Dec. 23-Jan. 10...	9		Nov. 30, present.
Argentina:				
Buenos Aires.....	Nov. 1-30...		1	
Australia:				
New South Wales.....				July 1, 1913-Jan. 8, 1914: cases 1,074.
Sydney, metropolitan area.....				July 1, 1913-Jan. 8, 1914: cases, 1,026.
Western Australia:				
Freemantle.....				Dec. 2, 1 fatal case on R. M. S. Malwa, from London via Port Said, Aden, and Colombo.
Austria-Hungary:				
Lower Austria—				
Vienna.....	Jan. 4-10...	1		
Tyrol and Vorarlberg.....	Nov. 23-Jan. 10...	5		
Upper Austria.....	Dec. 14-Jan. 3...	18		
Brazil:				
Bahia.....	Nov. 23-Jan. 31...	22		
Para.....	Dec. 1-Jan. 24...	23	32	
Pernambuco.....	Nov. 1-Jan. 15...		70	
Rio de Janeiro.....	Nov. 9-Jan. 31...	352	61	
Canada:				
Ontario—				
Hamilton.....	Jan. 1-31.....	9		
Ottawa.....	Dec. 7-Feb. 14...	14		
Toronto.....	Dec. 7-Feb. 7...	4		
Quebec—				
Montreal.....	Dec. 7-Feb. 21...	41		
Quebec.....	Jan. 24-31.....	1		
Ceylon:				
Colombo.....	Nov. 30-Dec. 6...	1		
China:				
Amoy.....	Dec. 14-Jan. 10...			Present.
Antung.....	Jan. 4-11.....	1		
Dairen.....	Dec. 7-27.....	4	1	
Hankow.....	Nov. 2-Jan. 17...	11	1	
Hongkong.....	Dec. 14-20.....	1		
Nanking.....	Jan. 24.....			Present.
Shanghai.....	Dec. 8-Jan. 18...	6	4	Deaths among natives.
Tientsin.....	Nov. 9-15.....		1	
Ting Chow.....	Jan. 5.....			Epidemic, 130 miles from Amoy.
Tong An.....	Dec. 27.....			Present, 20 miles from Amoy.
Dutch East Indies:				
Java.....				Dec. 13 to Jan. 10, 40 cases with 20 deaths in the interior.
Batavia.....	Nov. 9-Dec. 27...	51	13	
Surabaya.....	Oct. 28-Nov. 8...	3		
Egypt:				
Alexandria.....	Nov. 26-Feb. 4...	20	9	
Cairo.....	Nov. 19-Jan. 7...	79	28	
Port Said.....	Dec. 3-Jan. 28...	2	1	
France:				
Marseille.....	Nov. 1-Dec. 31...		72	
Nantes.....	Feb. 1-7.....	1		
Nice.....	Nov. 1-Dec. 31...	2		
Paris.....	Nov. 23-Jan. 31...	13		
St. Etienne.....	Nov. 16-Jan. 31...	9	3	
Germany:				
Hamburg.....	Dec. 11-25.....	4		Dec. 7-Feb. 7: Cases, 7.
Gibraltar:				
Gibraltar.....	Dec. 1-28.....	3		
Great Britain:				
London.....	Jan. 18-24.....	1		
Nottingham.....	Dec. 21-27.....	28		
Greece:				
Achaia and Elis, Province..	Jan. 29.....			Present.
Piræus.....	Jan. 18-27.....	19	5	
India:				
Bombay.....	Nov. 23-Jan. 17...	30	17	
Calcutta.....	Nov. 2-Jan. 10...		19	
Karachi.....	Nov. 2-Jan. 17...	6	1	
Madras.....	do.....	17	4	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from Dec. 27, 1913, to Mar. 6, 1914—Continued.

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Indo-China:				
Saigon.....	Nov. 11-24.....	1	1	
Italy:				
Leghorn.....	Dec. 21-27.....	1		
Turin.....	Dec. 22-28.....	1		
Japan:				Total Jan. 1-Dec. 31: Cases, 108; deaths, 39, exclusive of Taiwan
Fukuoka ken.....	Dec. 1-31.....	2		
Tokyo.....	Nov. 1-30.....	1		
Yokohama.....	Jan. 6-12.....	1	1	
Mauritius:	Oct. 2-23.....	60	4	
Mexico:				
Acapulco.....	Dec. 6.....		1	
Aguascalientes.....	Dec. 1-Feb. 8.....		43	
Chihuahua.....	Dec. 29-Feb. 1.....		10	
Durango.....	Apr. 1-May 31.....		77	
Guadalajara.....	Jan. 11-Feb. 14.....	89	46	
Imuris.....	Dec. 29-Jan. 4.....	5		
Llano.....	Jan. 17.....	8		
Mexico.....	Oct. 26-Nov. 29.....	31	15	
Monterey.....	Nov. 17-Jan. 4.....		4	
San Luis Potosi.....	Nov. 2-29.....	2		
Tampico.....	Dec. 24-Jan. 30.....	100	31	
Vera Cruz.....	Dec. 6-Feb. 7.....	9	4	
New Zealand:				Apr. 8 1913, to Jan. 7, 1914: Cases 2,006, including report, p. 2863, vol. 28.
Norway:				
Trondhjem.....	Nov. 1-Jan. 31.....	14		
Peru:				
Callao.....	Jan. 26.....			Still epidemic.
Lima.....	do.....			Do.
Philippine Islands:				Third quarter 1913; Cases, 15.
Manila.....				
Portugal:				
Lisbon.....	Nov. 16-Feb. 7.....	14		
Russia:				
Moscow.....	Dec. 14-27.....	2	2	
Odesa.....	Nov. 16-Jan. 10.....	4	2	
St. Petersburg.....	Nov. 23-Jan. 24.....	39	8	
Warsaw.....	Oct. 5-Nov. 29.....	44	29	
Servia:				
Belgrade.....	Nov. 7-Feb. 8.....	99	35	
Spain:				
Almeria.....	Nov. 1-Jan. 31.....		9	
Barcelona.....	Nov. 30-Jan. 31.....		49	
Madrid.....	Nov. 1-Jan. 31.....		87	
Seville.....	Nov. 1-30.....		1	
Valencia.....	Dec. 1-Feb. 7.....	7		
Straits Settlements:				
Penang.....	Nov. 2-Dec. 6.....	13	1	
Singapore.....	Nov. 2-22.....	2		
Switzerland:				
Canton—				
Basel.....	Nov. 23-Feb. 27.....	74		
Genoa.....	Nov. 23-29.....	3	1	
Turkey in Asia:				
Adana.....	Jan. 10-24.....	2		Dec. 28, epidemic.
Beirut.....	Nov. 23-Feb. 7.....	237	107	
Jaffa.....	Dec. 6-Jan. 31.....	19	1	
Mersina.....	Jan. 4-24.....	2		
Smyrna.....	Nov. 16-Jan. 17.....		143	
Tarsus.....	Dec. 28-Jan. 24.....			Still present.
Trebizond.....	Jan. 11-24.....			Present.
Tripoli.....	Jan. 25-31.....	16		
Turkey in Europe:				
Constantinople.....	Nov. 20-Jan. 31.....		13	
Saloniki.....	Dec. 1-Feb. 7.....		80	

SANITARY LEGISLATION.

COURT DECISIONS.

SUPREME COURT OF VERMONT.

Morbidity Reports—Failure of Physician to Report a Case—Evidence.

STATE V. PIERCE, 88 Atl. 740. Decided Oct. 13, 1913.

The respondent, a physician, was convicted in the Windsor County (Vt.) court. He was charged with failure to report to the local health officer a case of diphtheria which he attended. The conviction was sustained on appeal. Portions of the opinion which relate to questions of legal procedure are omitted.

POWERS, J.: This respondent was convicted under Public Statute 5454,¹ which requires an attending physician to report to the health officer known or suspected cases of communicable diseases dangerous to the public health. The illness directly involved was that of Pearl, infant daughter of William S. Newton, of Tyson, a small village in the town of Plymouth, who was attended by the respondent on several occasions between January 3 and 8, 1911, and who died on the 9th from diphtheria, as the evidence tended to show.

From the very necessities of the case, the State was obliged to rely upon circumstantial evidence to prove that the respondent knew or suspected that Pearl Newton's case was one of diphtheria. It was therefore proper and legitimate to show that other cases of this disease had existed in Tyson in the previous months of October and November; that the houses wherein these cases existed were quarantined with a placard thereon bearing in large letters the word "Diphtheria"; provided, of course, that there was evidence tending to show that the respondent knew about it, or that the circumstances were such that the jury could reasonably draw therefrom the inference that he knew about it. His knowledge of these facts was not the ultimate fact to be proved, but if established bore directly upon what his subsequent knowledge or suspicion would be when called to treat the Pearl Newton case. So the evidence regarding the cases of diphtheria in the Coolidge and Merrill houses and elsewhere in the community, and that the houses were placarded as stated, was properly received, for the evidence abundantly showed that the respondent was in the village at the time, and in such circumstances as to make it almost unbelievable that he failed to observe the diphtheria placards. Whether he did in fact see them was a question for the jury. But the fact that positive evidence thereof was not at hand did not render the evidence referred to inadmissible.

* * * * *

Dr. Haselton was a witness for the State. He was asked a hypothetical question as follows: "If you should be called into a family where one of the family complained of a sore throat—the mother—and there was a child 2 years old that was ill, had difficulty in breathing, and there had been cases of diphtheria in the immediate vicinity from four to six weeks before, and one member of the family, with whom another

¹ Public Health Bulletin No. 45, p. 151.

member of the family had been at the time, had died of diphtheria, would you naturally suspect the presence of any particular disease, and if so, what?"

To this question the respondent objected as not warranted by the testimony. This meant, of course, that the evidence did not sustain the assumed facts. * * * The court suggested that it was not a question what the witness would naturally suspect, and the State's attorney modified the question by asking, "What would an ordinary practicing physician naturally suspect under such circumstances?" Thereupon respondent's counsel said: "We desire an exception, because it is not a proper question as framed." The witness answered that he thought he would suspect diphtheria. To the question as finally admitted, the only objection was to its form. But this is a matter within the discretion of the court and not subject to review. Besides, the particular in which the question was improper was not pointed out, so there was nothing specific for the court to rule upon.

It appeared that Myrtie Newton, a sister of Pearl, was sick at the house of a neighbor, and died there November 8, 1910. After her burial, and before Pearl's sickness, by direction of the State authorities, Drs. Stone and Dalton, of Burlington, caused her body to be exhumed, and in the presence of the respondent performed an autopsy thereon, and showed the respondent the condition of the throat. This was on November 19. The organs removed from the body were shown Dr. Kidder, a witness for the State and a member of the State board of health, and he testified as to what the organs were, and that the larynx showed a diphtheritic membrane. This answer was objected to; but no ground of objection was stated, so we take no time with it. The witness was then asked, "Would that (diphtheritic membrane) be apparent to an ordinary practicing physician?" This question was objected to, because it was "having the witness take the place of the jury." The question was then modified slightly, and, subject to exception, the witness answered that he thought it would.

* * * * *

We find the admission of the testimony to be without error. As we have seen, the autopsy was about 10 days after the death of Myrtie Newton. We must assume that the organs had been in a preservative liquid since, for it is common knowledge of which we may take notice that such is the means employed by the medical profession. The respondent was present when they were removed and had a fair chance to observe their condition and form a judgment as to what it indicated. That appearance might mean nothing to an ordinary man and yet be highly significant to a physician. There is no doubt whatever that the witness could state what the appearance of the larynx indicated to him; the only question on which there can be any doubt is whether it was permissible to allow the expert to add the statement which, fairly interpreted, meant that the indications of a diphtheritic condition were so plain as to be apparent to an ordinary practitioner. That the answer was an inference drawn from the organ before him, coupled with his knowledge of the state of professional attainment in that vicinity, may be admitted, without putting the trial court in error. Inferences from observed facts are admissible when the inferred fact itself is relevant, and the constituent facts can not adequately be placed before the jury. (*Clifford v. Richardson*, 18 Vt. 620; *Williams v. Norton Bros.*, 81 Vt. 1, 69 Atl. 146.) Here the fact itself was relevant, because if this larynx on November 19 indicated that Myrtie had had diphtheria, it rendered more probable the ultimate fact that in January following the respondent knew or suspected that Pearl had it.

That the constituent facts could not adequately be placed before the jury is equally plain. For, though the witness could have pointed out to the jury the appearances which indicated to his trained eye their diphtheritic character, their full significance would not be appreciated by the jury until they knew whether they meant the same thing to other doctors. Without this, the jury might reason that, though Dr. Kidder might recognize the indications, one less skilled, though a doctor, might not. Indeed, the respondent's brief contains an implied admission of this, for the very ground taken

is that Dr. Kidder's statement can not be true, because he speaks as a surgeon, while the respondent is a physician, and a physician can not be expected to recognize post mortem conditions and indications. How much more, then, would the jury, wholly untrained in such matters, require the assistance of an expert to appreciate the significance of the physical appearance of this diseased larynx.

In sustaining the admission of this evidence we are doing no more than is always done in a malpractice case, wherein a duly qualified physician is allowed to testify to the local standard of professional skill, and that a given course of treatment did or not meet its requirements, though the witness be of more professional prominence than the doctor whose treatment is in question and practices elsewhere. (*Willard v. Norcross*, 86 Vt. 426, 85 Atl. 904.) In such cases the expert is giving the jury information as to the progress and condition of local professional knowledge, and that is all that was done here.

Other medical witnesses testified to like effect, but need not be specially referred to.

There was no error in admitting the reports from the State laboratory on the cultures taken from the throat of Leroy Hyde. These were taken by the respondent between November 14 and 26, 1910, and sent by him, and the reports came back to him. Some, he admitted, were positive. They had the same bearing upon the main issue that the other evidence regarding the previous cases of diphtheria at Tyson had—they added to the sum of the respondent's knowledge another circumstance which a thoughtful juror would consider before deciding the main question.

Judgment that there is no error, and that the respondent takes nothing by his exceptions.

Let execution of sentence be done.

COURT OF APPEALS OF KENTUCKY.

Local Board of Health—Powers of—Regulations—Bottling of Milk.

BOARD OF HEALTH OF COVINGTON ET AL. v. KOLLMAN, 160 S. W., 1052. Decided December 9, 1913.

Plaintiff, a dairyman, refused to comply with the regulation of the Board of Health of Covington, Ky., relative to the bottling of milk, claiming that it was invalid, and brought suit to enjoin the board from prosecuting him for selling milk without a permit and to compel the issuance to him of a permit. He was successful in the circuit court, but the case was reversed on appeal. The opinion is given in full.

CLAY, C.: In the year 1909 the general council of the city of Covington enacted an ordinance covering the sale of milk and other dairy products and regulating the sanitary condition of dairies and milk depots and the condition and use of utensils, vehicles, etc., used in handling, manufacturing, or sale of milk and dairy products in Covington, Ky., and repealing certain ordinances of the city of Covington. The ordinance conferred on the board of health powers of inspection and examination. It further provided as follows: "Upon the board of health of the city of Covington being satisfied that the place or places where the milk or milk products are to be kept or offered for sale, or from which they are obtained, are sanitary, or that the cows from which said milk is obtained are free from disease and kept in a sanitary place and manner, said board of health shall grant a permit to the applicant conditioned upon his compliance with the terms of this ordinance and the rules and regulations of the State board of health and board of health of the city of Covington. Said permit may be revoked at any time by the board of health of Covington, Ky., should the holder thereof fail or refuse to comply with the provision of this ordinance."

On January 31, 1912, the board of health of the city of Covington adopted the following rule:

"Be it resolved by the board of health of the city of Covington, State of Kentucky, That the following regulations are necessary for the public health and are therefore regulations of this board:

"SECTION 1. No person or dealer in milk and no servant or agent of such dealer in milk, except such as may sell for consumption upon the premises where sold, shall give, furnish, sell, or offer for sale or deliver any whole milk, skimmed milk, or cream in quantities less than 1 gallon, unless said milk or cream be in sanitary transparent glass bottles or other receptacles of similar character as may be approved by this board, the same to be sealed with a suitable cap or stopper. The said bottle or other receptacle shall be sealed immediately after filling the same, which sealing and filling shall only be done in a milk house or creamery, the sanitary condition of which has been approved by this board.

"SEC. 2. It shall be unlawful to fill or refill with sweet milk or cream any glass jar or bottle or other receptacle with intent to sell or vend such milk unless such glass jar or bottle be first thoroughly cleaned and sterilized, unless a nonrefillable receptacle be used, and they must be perfectly sterile when filled.

"SEC. 3. No person, dealer, servant or agent of such a dealer shall give, furnish, sell, or offer for sale milk, skimmed milk, or cream in quantities exceeding 1 gallon unless the can or receptacle be filled in milk room or creamery, the same to be immediately and securely sealed by a tight-fitting top or cap.

"SEC. 4. No person shall transfer any milk from one can, bottle, or other receptacle to another on any street, alley, or thoroughfare or upon a delivery wagon or other vehicle or in any exposed place in the city of Covington, Ky.

"SEC. 5. This ordinance shall take effect and be in force from and after May 1, 1912."

Plaintiff, Henry Kollman, a dairyman engaged in the business of selling milk by retail in the city of Covington, refused to comply with the regulation of the board of health in regard to bottling his milk, and for this reason was refused a permit to sell milk in the city of Covington. Alleging that the regulation of the board of health with reference to the bottling of milk was invalid, plaintiff brought this action to enjoin the board of health and its health officer from prosecuting him for selling milk without a permit, and to compel the board of health to issue him a permit. The case being submitted on the pleadings, exhibits, and agreed facts, plaintiff was granted the relief prayed for, and from the judgment so entered the board of health and J. M. O'Maley, its health officer, appeal.

It is the contention of plaintiff that the powers conferred on local boards of health do not authorize them to adopt a regulation of the character of the one in question, and, that being true, the board of health of the city of Covington, which was a mere administrative agent of the city to look after the enforcement of the ordinance enacted by the general council, has no power to enact rules and regulations in addition to and inconsistent with the provisions of the ordinance under which it acts. In this connection it is pointed out that the ordinance in question is very comprehensive. It deals with every phase of the dairy and milk business. It does not require the bottling of milk, but by using the words "cans and vessels" impliedly authorizes the use of other receptacles than bottles. There might be much merit in plaintiff's contention if the powers of the local board of health were derived solely from the general council. Such, however, is not the case. It is the mandatory duty of the general council of every city having a population of not less than 2,500 inhabitants to appoint a board of health; the number of its members varying according to the city's population. In such cities the local boards of health are invested with the same powers as the county local boards. (Kentucky Statutes, sec. 2059.) That the legislature may create local boards of health and confer on them authority to make reasonable regulations for the health of their community is well settled. (*Hengehold v. City of Covington*, 108 Ky., 752; 57 S. W., 495; 22 Ky. Law Rep., 462.)

Section 2055, Kentucky statutes, provides in part as follows: "Such local boards are empowered and it shall be their duty to inaugurate and execute and to require the heads of families and other persons to execute such sanitary regulations as the local board may consider expedient to prevent the outbreak and spread of cholera, smallpox, yellow fever, scarlet fever, diphtheria, and other epidemic and communicable diseases, and to this end may bring the infected population under prompt and proper treatment during the premonitory or other stages of the disease, and they are empowered to go upon and inspect any premises which they may believe are in an unclean or infectious condition, and it shall be empowered to fix and determine the location of an eruptive hospital for the county, sufficiently remote from human habitation and public highways as in its judgment is safe, and said boards are authorized and shall have power to enforce the rules and regulations adopted by the State board of health, * * * and such local board shall make report to the State board of health at least once in every three months—first, the character of the infectious, epidemic, and communicable diseases prevailing in their county; second, the number reported as afflicted with such disease; third, the action taken by such board in arresting the progress of such epidemics, and the visible effects of such action, and shall also make special reports when they deem it expedient or when required by the State board, and the local board shall receive no compensation for such service."

Section 2057, Kentucky Statutes, is as follows: "The State board of health and the local boards shall have power and authority to examine into all nuisances, sources of filth, and causes of sickness that may, in their opinion, be injurious to the health of the inhabitants within any county in this State, or in any vessel within any harbor or port in any county in this State; and whenever any such nuisance, source of filth, or cause of sickness shall be found to exist on any private property, or in any vessel within any port or harbor of any county in this State, or upon any water course in this State, the State board of health, or local board of health, shall have power and authority to order, in writing, the owner or occupant thereof, at his own expense, to remove the same within 24 hours or within such reasonable time thereafter as such board may order, and if the owner or occupant shall neglect so to do, he shall be fined not less than \$10 nor more than \$100, and each day's continuance of such nuisance, or source of filth, or cause of sickness, after the owner or occupant thereof shall have been notified to remove the same, shall be a separate offense."

It will be observed that by the foregoing sections local boards are empowered, and it is made their duty, to execute such sanitary regulations as the local board may consider expedient to prevent the outbreak of cholera, smallpox, yellow fever, scarlet fever, diphtheria, and other epidemics and communicable diseases. Such local boards are further empowered to examine into all nuisances, sources of filth, or causes of sickness that in their opinion may be injurious to the health of the inhabitants within any county of the State. We are not inclined to take the narrow view that the broad powers thus given can only be exercised by local boards where an epidemic actually exists or where the cause of sickness is such as to amount to a nuisance. It is well settled that the powers of such boards, conferred for the protection of the public health, should be liberally construed in order to effectuate the purpose of the legislature. (*Gregory v. City of New York*, 40 N. Y., 273; *City of Bardstown v. Nelson County*, 78 S. W., 169; 25 Ky. Law Rep., 1478; *Allison v. Cash*, 143 Ky., 679; 137 S. W., 245; *Hengehold v. City of Covington*, 108 Ky., 752; 57 S. W., 495; 22 Ky. Law Rep., 462.) The most effective way to prevent disease is to remove the cause thereof. Therefore local boards are given the power not only to prevent the spread of epidemic and communicable diseases but to prevent their outbreak, and to this end are given the further power to examine into and abate such causes of sickness as may in their opinion be injurious to the health of the inhabitants within any county of the State.

But it is insisted that the sale of milk in cans is not shown to be such cause of disease as to justify the regulation in question, and that to give such a construction to the statute would open the way for health boards to adopt all sorts of fads. In response to the first contention, however, it is sufficient to say that it is a recognized fact that numerous diseases result from the careless handling of milk, and that cans are not as sanitary as sealed bottles. Being the agency created by the legislature to prevent the outbreak and spread of disease and to remove causes of sickness, the presumption is always in favor of the board of health, and its action will not be interfered with unless it appear unreasonable or oppressive. The fact that its membership may sometimes be composed of extremists is no reason for denying the power conferred by the legislature. Nor should we be controlled by the fact that a scientific theory of to-day may be discarded to-morrow. In matters affecting the public health it is the part of reason and common sense to adopt the best scientific thought of the age in which we live. If research and investigation lead to other accepted theories, then we must adopt them. Were the rule otherwise, both the courts and the legislature would be without a competent guide. Viewing the matter in the light of the accepted theories of science at the present time, a regulation of a local board of health requiring milk to be handled in sealed transparent bottles is neither unreasonable nor oppressive.

Being of the opinion that the board of health of the city of Covington had power to adopt the regulation in question, and that the regulation was reasonable, it follows that the lower court erred in granting plaintiff the relief prayed for.

Judgment reversed, and cause remanded, with directions to dismiss the petition.

SUPREME COURT OF THE UNITED STATES.

Food and Drugs Act—Adulteration of Foodstuffs.

UNITED STATES V. LEXINGTON MILL & ELEVATOR CO. Decided Feb. 24, 1914.

The fifth subdivision of section 7 of the United States food and drugs act (34 Stat. L., 768) provides that food shall be deemed to be adulterated if it contain any added poisonous or other added deleterious ingredient which may render such article injurious to health.

The statute upon its face shows that the primary purpose of Congress was to prevent injury to the public health by the sale and transportation in interstate commerce of misbranded and adulterated foods.

In prosecutions under the fifth subdivision of section 7, the Government must establish, in order to secure a verdict of condemnation under the statute, that the added poisonous or deleterious substances may render the article of food injurious to health.

The opinion is printed in full.

DAY, J.: The petitioner, the United States of America, proceeding under section 10 of the food and drugs act (34 Stat., 768), by libel filed in the District Court of the United States for the Western District of Missouri, sought to seize and condemn 625 sacks of flour in the possession of one Terry, which had been shipped from Lexington, Nebr., to Castle, Mo., and which remained in original unbroken packages. The judgment of the district court, upon verdict in favor of the Government, was reversed by the Circuit Court of Appeals for the Eighth Circuit (202 Fed., 615), and this writ of certiorari is to review the judgment of that court.

The amended libel charged that the flour had been treated by the "Alsop process," so called, by which nitrogen peroxide gas generated by electricity was mixed with atmospheric air and the mixture then brought in contact with the flour, and that it was thereby adulterated under the fourth and fifth subdivisions of section 7 of the act, namely (1) in that the flour had been mixed, colored, and stained in a manner whereby damage and inferiority was concealed and the flour given the appearance of a better

grade of flour than it really was, and (2) in that the flour had been caused to contain added poisonous or other added deleterious ingredients, to wit, nitrites or nitrite reacting material, nitrogen peroxide, nitrous acid, nitric acid, and other poisonous and deleterious substances which might render the flour injurious to health. The libel also charged that the flour was adulterated under the first subdivision of section 7, and was misbranded; but the Government does not urge these features of the case here. The verdict was broad enough to cover the charge under the first subdivision of section 7, but in the view we take of the case as to the instruction of the court under subdivision 5 need not be noticed.

The Lexington Mill & Elevator Co., the respondent herein, appeared, claiming the flour, and answered the libel, admitting that the flour had been treated by the Alsop process, but denying that it had been adulterated and attacking the constitutionality of the act.

A special verdict to the effect that the flour was adulterated was returned and judgment of condemnation entered. The case was taken to the circuit court of appeals upon writ of error. The respondent contended that, among other errors, the instructions of the trial court as to adulteration were erroneous and that the act was unconstitutional. The circuit court of appeals held that the testimony was insufficient to show that by the bleaching process the flour was so colored as to conceal inferiority and was thereby adulterated, within the provisions of subdivision 4. That court also held—and this holding gives rise to the principal controversy here—that the trial court erred in instructing the jury that the addition of a poisonous substance, in any quantity, would adulterate the article, for the reason that “the possibility of injury to health due to the added ingredient and in the quantity in which it is added is plainly made an essential element of the prohibition.” It did not pass upon the constitutionality of the act, in view of its rulings on the act’s construction.

The case requires a construction of the food and drugs act. Parts of the statute pertinent to this case are:

“SEC. 7. That for the purposes of this act an article shall be deemed to be adulterated: * * *

“In case of food:

“First. If any substance has been mixed and packed with it so as to reduce or lower or injuriously affect its quality or strength. * * *

“Fourth. If it be mixed, colored, powdered, coated, or stained in a manner whereby damage or inferiority is concealed.

“Fifth. If it contains any added poisonous or other added deleterious ingredient which may render such article injurious to health. * * *

“SEC. 10. That any article of food, drug, or liquor that is adulterated or misbranded within the meaning of this act, and is being transported from one State, Territory, district, or insular possession to another for sale, or, having been transported, remains unloaded, unsold, or in original unbroken packages, * * * shall be liable to be proceeded against in any district court of the United States within the district where the same is found, and seized for confiscation by a process of libel for condemnation. And if such article is condemned as being adulterated or misbranded, or of a poisonous or deleterious character, within the meaning of this act, the same shall be disposed of by destruction or sale, as the said court may direct.”

Without reciting the testimony in detail, it is enough to say that for the Government it tended to show that the added poisonous substances introduced into the flour by the Alsop process, in the proportion of 1.8 parts per million, calculated as nitrogen, may be injurious to the health of those who use the flour in bread and other forms of food. On the other hand, the testimony for the respondent tended to show that the

process does not add to the flour any poisonous or deleterious ingredients which can in any manner render it injurious to the health of a consumer. On these conflicting proofs the trial court was required to submit the case to the jury. That court, after stating the claims of the parties, the Government insisting that the flour was adulterated and should be condemned if it contained any added poisonous or other added deleterious ingredient of a kind or character which was capable of rendering such article injurious to health; the respondent contending that the flour should not be condemned unless the added substances were present in such quantity that the flour would be thereby rendered injurious to health, gave certain instructions to the jury. Part of the charge, excepted to by the respondent, reads:

"The fact that poisonous substances are to be found in the bodies of human beings, in the air, in potable water, and in articles of food, such as ham, bacon, fruits, certain vegetables, and other articles, does not justify the adding of the same or other poisonous substances to articles of food, such as flour, because the statute condemns the adding of poisonous substances. Therefore the court charges you that the Government need not prove that this flour or foodstuffs made by the use of it would injure the health of any consumer. It is the character—not the quantity—of the added substance, if any, which is to determine this case."

On the other hand the respondent insisted that the law is, and requested the court to charge the jury:

"That the burden is upon the prosecution to prove the truth of the charge in the libel, that by the treatment of the flour in question by the said Alsop process it has been caused to contain added poisonous or other added deleterious ingredients, to wit, nitrites or nitrite reacting material, which may render said flour injurious to health.

"And in this connection you are further instructed that it is incumbent upon the Government to prove that any such added poisonous or other added deleterious ingredients, if any contained in said flour, are of such a character and contained in the flour seized in such quantities, conditions, and amounts as may render said flour injurious to health, and unless you find that all of such facts are so proven you can not find against the claimant or condemn the flour in question under that charge in the libel, and if you fail to so find, your verdict upon that count or charge in the libel must be in favor of the claimant or defendant."

* * * * *

"The law does not prohibit the adding of nitrites or nitrite reacting material to flour, and a jury can not find for the Government or against the claimant, even if it be shown that nitrites or nitrite reacting material was added to the flour in question, unless they believe from a preponderance of the evidence that such addition, if any, rendered such flour injurious to the health of those who might consume the bread or other foods made from said flour."

It is evident from the charge given and refused that the trial court regarded the addition to the flour of any poisonous ingredient as an offense within this statute, no matter how small the quantity, and whether the flour might or might not injure the health of the consumer. At least such is the purport of the part of the charge above given, and if not correct, it was clearly misleading, notwithstanding other parts of the charge seem to recognize that in order to prove adulteration it is necessary to show that the flour may be injurious to health. The testimony shows that the effect of the Alsop process is to bleach or whiten the flour and thus make it more marketable. If the testimony introduced on the part of the respondent was believed by the jury they must necessarily have found that the added ingredient, nitrites of a poisonous character, did not have the effect to make the consumption of the flour by any possibility injurious to the health of the consumer.

The statute upon its face shows that the primary purpose of Congress was to prevent injury to the public health by the sale and transportation in interstate commerce of misbranded and adulterated foods. The legislation, as against misbranding,

intended to make it possible that the consumer should know that an article purchased was what it purported to be; that it might be bought for what it really was and not upon misrepresentations as to character and quality. As against adulteration, the statute was intended to protect the public health from possible injury by adding to articles of food consumption poisonous and deleterious substances which might render such articles injurious to the health of consumers. If this purpose has been effected by plain and unambiguous language, and the act is within the power of Congress, the only duty of the courts is to give it effect according to its terms. This principle has been frequently recognized in this court.

Lake County v. Rollins (130 U. S., 662, 670):

"Where a law is expressed in plain and unambiguous terms, whether those terms are general or limited, the legislature should be intended to mean what they have plainly expressed, and consequently no room is left for construction."

Hamilton v. Rathbone (175 U. S., 414, 421):

"The cases are so numerous in this court to the effect that the province of construction lies wholly within the domain of ambiguity, that an extended review of them is quite unnecessary."

Furthermore, all the words used in the statute should be given their proper signification and effect.

Washington Market Co. v. Hoffman (101 U. S., 112, 115):

"We are not at liberty," said Mr. Justice Strong, "to construe any statute so as to deny effect to any part of its language. It is a cardinal rule of statutory construction that signification and effect shall, if possible, be accorded to every word. As early as in Bacon's Abridgment, section 2, it was said that 'a statute ought, upon the whole, to be so construed that, if it can be prevented, no clause, sentence, or word shall be superfluous, void, or insignificant.' This rule has been repeated innumerable times."

Applying these well-known principles in considering this statute, we find that the fifth subdivision of section 7 provides that food shall be deemed to be adulterated: "If it contain any added poisonous or other added deleterious ingredient which may render such article injurious to health." The instruction of the trial court permitted this statute to be read without the final and qualifying words, concerning the effect of the article upon health. If Congress had so intended the provision would have stopped with the condemnation of food which contained any added poisonous or other added deleterious ingredient. In other words, the first and familiar consideration is that, if Congress had intended to enact the statute in that form, it would have done so by choice of apt words to express that intent. It did not do so, but only condemned food containing an added poisonous or other added deleterious ingredient when such addition might render the article of food injurious to the health. Congress has here, in this statute, with its penalties and forfeitures definitely outlined its inhibition against a particular class of adulteration.

It is not required that the article of food containing added poisonous or other added deleterious ingredients must affect the public health, and it is not incumbent upon the Government in order to make out a case to establish that fact. The act has placed upon the Government the burden of establishing, in order to secure a verdict of condemnation under this statute, that the added poisonous or deleterious substances must be such as may render such article injurious to health. The word "may" is here used in its ordinary and usual signification, there being nothing to show the intention of Congress to affix to it any other meaning. It is, says Webster, "an auxiliary verb, qualifying the meaning of another verb, by expressing ability, * * * contingency or liability, or possibility or probability." In thus describing the offense Congress doubtless took into consideration that flour may be used in many ways, in bread, cake, gravy, broth, etc. It may be consumed, when prepared as a food, by the strong and the weak, the old and the young, the well and the sick; and it is intended that if any flour, because of any added poisonous or other deleterious

ingredient, may possibly injure the health of any of these, it shall come within the ban of the statute. If it can not by any possibility, when the facts are reasonably considered, injure the health of any consumer, such flour, though having a small addition of poisonous or deleterious ingredients, may not be condemned under the act. This is the plain meaning of the words and in our view needs no additional support by reference to reports and debates, although it may be said in passing that the meaning which we have given to the statute was well expressed by Mr. Heyburn, chairman of the committee having it in charge, upon the floor of the Senate (Congressional Record, vol. 40, pt. 2, p. 1131):

"As to the use of the term 'poisonous,' let me state that everything which contains poison is not poison. It depends on the quantity and the combination. A very large majority of the things consumed by the human family contain, under analysis, some kind of poison, but it depends upon the combination, the chemical relation which it bears to the body in which it exists, as to whether or not it is dangerous to take into the human system."

And such is the view of the English courts construing a similar statute. The English statute provides (sec. 3 of the sale of food and drugs act, 1875):

"No person shall mix, color, * * * or order or permit any other person to mix, color, * * * any article of food with any ingredient or material so as to render the article injurious to health."

That section was construed in *Hull v. Horsnell* (68 J. P., 591), which involved preserved peas, the color of which had been retained by the addition of sulphate of copper, charged to be a poisonous substance and injurious to health. There was a conviction in the lower court. Lord Alverstone, C. J., in reversing and remitting the case on appeal, said:

"In my opinion, if the justices convicted the appellant of an offense under section 3 of the sale of food and drugs act, 1875, on the ground that the ingredient mixed with the article of food was injurious to health—that the sulphate of copper was injurious to health—and not on the ground that the peas by reason of the addition of sulphate of copper were rendered injurious to health, the conviction is clearly wrong. To constitute an offense under the latter part of section 3 the article of food sold must, by the addition of an ingredient, be rendered injurious to health. All the circumstances must be examined to see whether the article of food has been rendered injurious to health."

We reach the conclusion that the circuit court of appeals did not err in reversing the judgment of the district court for error in its charge with reference to subdivision 5 of section 7.

The circuit court of appeals reached the conclusion that there was no substantial proof to warrant the conviction, under the fourth subdivision of section 7, that the flour was mixed, colored, and stained in a manner whereby damage and inferiority was concealed. As the case is to be retried by a jury, we say nothing more upon this point.

As to the objection on constitutional grounds, it is not contended that the statute as construed by the circuit court of appeals and this court is unconstitutional.

It follows that the judgment of the circuit court of appeals reversing the judgment of the district court must be affirmed and the case remanded to the district court for a new trial. Affirmed.

STATE LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

IOWA.

Morbidity Reports—Venereal Diseases. (Act Mar. 29, 1913.)

SECTION 1. *Contagious diseases defined.*—That syphilis and gonorrhea are hereby declared contagious and infectious and shall be reported as contagious diseases to the local board of health.

SEC. 2. *Physicians' duty to report—Record—Name not disclosed.*—From and after the 1st day of January, A. D. 1914, it shall be the duty of every physician and surgeon practicing within the State of Iowa to report to the local board of health, within 24 hours, every case of syphilis or gonorrhea coming to his knowledge, and shall make and preserve a record of every such case so reported, numbering each case consecutively. He shall require the person to state whether or not he has been previously reported to a local board of health in this State, and if so, when, where, by whom, and under what number. The report shall state the sex of the person and the age as nearly as practicable, together with the character of the disease and the probable source of infection, and whether previously reported or not, and if so, when, where, by whom, and under what number, but shall not disclose the name of the infected person.

SEC. 3. *Failure to report—Penalty.*—Any physician or surgeon who shall be called upon to treat professionally anyone afflicted with syphilis or gonorrhea who shall fail to report the same to the local board of health within 24 hours shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not exceeding \$100 or imprisonment in the county jail not more than 30 days. And in addition thereto the State board of health may revoke his license or certificate to practice medicine, surgery, and obstetrics in the State of Iowa.

SEC. 4. *Transmission—Penalty.*—Any person afflicted with either of these diseases who shall knowingly transmit or assume the risk of transmitting the same by intercourse to another person shall be guilty of a misdemeanor, and upon conviction thereof be fined in the sum of not to exceed \$500 or imprisoned in the county jail not to exceed one year, or both such fine and imprisonment. And in addition thereto shall be liable to the party injured in damages to be recovered in any court of competent jurisdiction.

SEC. 5. *Acts in conflict repealed.*—All acts or parts of acts in conflict with any of the foregoing sections are hereby repealed.

NEW YORK.

Industrial Diseases—Notification of Cases. (Chap. 145, Act Mar. 28, 1913.)

SEC. 65. *Industrial poisonings to be reported.*—1. Every medical practitioner attending on or called in to visit a patient whom he believes to be suffering from poisoning from lead, phosphorus, arsenic, brass, wood alcohol, mercury, or their compounds, or from anthrax, or from compressed-air illness, contracted as the result of the nature of the patient's employment, shall send to the commissioner of labor a notice stating the name and full postal address and place of employment of the patient and the disease from which, in the opinion of the medical practitioner, the patient is suffering, with such other and further information as may be required by the said commissioner.

2. If any medical practitioner, when required by this section to send a notice, fails forthwith to send the same, he shall be liable to a fine not exceeding \$10.

3. It shall be the duty of the commissioner of labor to enforce the provisions of this section, and he may call upon the State and local boards of health for assistance.

WASHINGTON.

Communicable Diseases—Isolation—Smallpox—Measles. (Reg. Bd. of H., July 27, 1913.)

Paragraph (c), rule 4, section 6,¹ Rules and regulations relating to smallpox, was amended as follows:

"All cases of smallpox shall be handled according to the general rules laid down under section on 'Isolation' (sec. 2²) until desquamation has ceased—in an insolation hospital, wherever possible.

"All persons who, in the opinion of the health officer, have been exposed to smallpox shall be isolated for 18 days or shall be vaccinated, unless protected by a previous attack of smallpox or vaccination within seven years."

Paragraph (a), rule 7, section 6,³ Rules and regulations relating to measles, was amended as follows:

"All cases of measles must be handled according to the general rules laid down under section on 'Isolation' (sec. 2⁴) until eruption disappears.

"All cases of measles must be reported to the health officer; and none of the children of the family in which the disease exists, who are still susceptible of acquiring the disease, shall attend any public, parochial, or private school or Sunday school for two weeks after the beginning of the last case in the family.

Burial—Depth of. (Reg. Bd. of H., July 27, 1913.)

Section 13,⁵ rules regulating preparation for burial and conducting of funerals, was amended by the addition of the following, to be known as rule 12:

"Hereafter all deceased human bodies that are disposed of by earth burial in the State of Washington must be buried in the ground at a depth of at least 3 feet."

¹ Public Health Reports, Mar. 14, 1913, p. 534.

² Public Health Reports, Feb. 28, 1913, p. 414.

³ Public Health Reports, Mar. 14, 1913, p. 535.

⁴ Public Health Reports, Feb. 28, 1913, p. 414.

⁵ Public Health Reports, Mar. 28, 1913, p. 631.

MUNICIPAL ORDINANCES, RULES, AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

CHICAGO, ILL.

Rabies—Muzzling of Dogs—Destruction of Rabid Dogs. (Ord. Mar. 31, 1913.)

Sections 769 and 779 of the Chicago Code of 1911 were amended so as to read as follows:

"**SEC. 769. Muzzling.**—No person shall cause or permit any dog owned or kept by him to run at large on any street, alley, or other public place, nor in any public hall, saloon, office, store, market, milk depot, or confectionery store during the time that the said place is open for public business, or in the hallway of any building occupied by two or more families, within the city of Chicago at any time, unless such dog shall be securely muzzled so as to effectually prevent it from biting any person or animal.

"Any such person being the owner or keeper of a dog who shall suffer such dog to run at large at any time in violation of the provisions of this section shall be fined not less than \$2 nor more than \$200 for each offense.

"Every day on which such person shall suffer any dog owned or kept by him to run at large without a muzzle, after the first conviction under this section, shall constitute a separate and distinct offense.

"Nothing herein contained shall be held to require the muzzling of any dog while on private premises, or while on any street, alley, or other public place, or in any of the places above mentioned in this section, if such dog shall be led by a chain or in leash, in such manner so as to prevent such dog from biting any person or animal.

"But nothing herein contained shall be construed to permit any bitch when in heat, whether muzzled or otherwise to run at large.

"It shall be the duty of every police officer to report to the superintendent of police any dog which is found in his district contrary to the provisions of this section."

"**SEC. 779. Definition.**—The word 'dog' whenever used in this chapter shall include a female as well as a male dog.

"**Mad dogs biting other dogs.**—Any dog suffering from rabies or any dog bitten by a dog suffering from rabies is hereby declared to be a nuisance and such dog may be slain by any policeman.

"It shall be the duty of any person owning or exercising ownership or agency over any such dog to surrender said dog to any policeman upon demand.

"Any person refusing or failing to so surrender such dog upon demand shall be fined not less than \$2 nor more than \$200."

Glasses, Cups, Dishes, and Utensils—Cleaning of, in Places of Public Refreshment. (Ord. May 5, 1913.)

That article 20 of chapter 38 of the Chicago Code of 1911 be and the same is hereby amended by adding thereto the following section, to be known as section 1370½:

"1370½. Any and every glass, cup, dish, and other eating or drinking vessel or utensil used in or at any hotel, saloon, restaurant, drug store, soda fountain, or other place of public refreshment in the city shall be thoroughly cleansed in running water or in clean water after each and every use thereof by any patron, and prior to any further use thereof in eating or drinking by any other patron; and no such glass, cup, dish,

or other eating or drinking vessel or utensil, after use by one patron in eating or drinking, shall be offered or permitted to be used by any other patron without such glass, cup, dish, or other eating or drinking vessel or utensil having been first thoroughly cleansed in running water or clean water.

"Any person, firm, or corporation owning or operating any hotel, saloon, restaurant, drug store, soda fountain, or other place of public refreshment, or any employee in charge of same or serving refreshments therein, who shall fail to comply with the requirements of this section shall be fined not less than \$5 nor more than \$50 for each offense."

Hospital Morbidity Reports and Records—Communicable Diseases, Mental Diseases, Drug Addiction—Removal of Patients. (Ord. May 19, 1913.)

That sections 1197, article 7, and 1222 and 1223, article 9, chapter 7, of the Chicago Code of 1911, be and the same are hereby amended to read as follows:

"1197. *Removal of sick persons—Exposure of person forbidden.*—No person shall, within the city, without a permit from the commissioner of health, carry or remove from one place to another any person sick of any contagious or epidemic disease. Nor shall any person by any exposure of any individual sick of any such disease, or of the body of such person, or by any negligent act connected therewith or in respect of the care or custody thereof, or by a needless exposure of himself, cause or contribute to or promote the spread of disease from any such person or from any dead body; nor shall any person, within the city, without a permit from the commissioner of health, carry, remove, or convey from one place to another any person having a mental disease or drug addiction, unless such person is in charge of city, county, or State authorities."

"1222. *Complete records to be kept.*—Each and every hospital shall keep a complete record of all patients admitted to the institution, giving name, age, and social condition of each patient (except as hereinafter provided in sec. 1225), and the mental or physical disease, drug addiction, or injury for which such patient is being treated, together with any complications which may arise from or during such treatment, and the date of admission and discharge of such patient from such hospital. In the case of maternity hospitals, such record shall show the date of birth, sex, and disposition of every child born in such maternity hospital. Such records shall be open at all times to the inspection of the commissioner of health or his duly authorized representatives."

"1223. *Daily, weekly, and monthly reports.*—It shall be the duty of every person, firm, or corporation conducting or maintaining any hospital within the city to make a report to the commissioner of health daily by telephone and by mail, of all cases of actively contagious diseases, as smallpox, chickenpox, diphtheria, scarlet fever, mumps, measles, German measles, impetigo contagiosa, anterior poliomyelitis, or any other disease which may now or at any future time be classified by the commissioner of health as an actively communicable disease, with which any patient or patients in such hospital may be afflicted. It shall also be the duty of all such persons, firms, or corporations licensed, as provided in section 1214 of this article, to make a weekly report to the commissioner of health, covering all forms of mental disease or drug addiction, or typhoid fever, tuberculosis, epidemic cerebrospinal fever, pneumonia, and such other diseases as may be designated by the commissioner of health as being of a character similar to those herein enumerated. Such daily and weekly reports shall contain the names and residences of all persons suffering from any and all of the above-mentioned diseases, together with such other information as shall be of use in aiding the department of health in stamping out the said diseases. It shall be the further duty of all such persons, firms, or corporations licensed as aforesaid to make a report to the commissioner of health, on or before the fifth day of each calendar month, showing a complete record of

such hospital during the preceding month, including the names and addresses of patients dying during the month, the cause of each such death, and such other information as may be necessary to an intelligent supervision of the establishment. In case of a maternity hospital, such report shall set forth the names or the registered numbers of patients received and discharged, the disposition of infants born therein, the results of treatment, and such other information as the commissioner of health may require. All reports required under this section shall be made in full upon blanks which shall be furnished for that purpose by the commissioner of health and all weekly and monthly reports shall be verified by the affidavit or affirmation by the chief physician, superintendent, or officer in charge of such hospital."

Rabies—Free Treatment for Indigent Persons. (Ord. June 16, 1913.)

Ordered, That the commissioner of health be, and he is hereby, authorized and directed to provide, free of charge, medicine and treatment to all residents of the city suffering from, or in danger of, rabies through dog bites, if said persons are too poor to provide such treatment themselves.

Bread—Protection of, When Sold at Wholesale—Boxes. (Ord. July 28, 1913, as amended Dec. 17, 1913.)

SECTION 1. It shall be unlawful for any person, firm, or corporation to deliver or sell at wholesale any bread to any retailer in the city of Chicago, except such bread shall be placed in closed boxes, which shall be kept at least 1 foot above the surface of the sidewalk or floor; and provided such boxes shall be thoroughly cleaned at least once in each week.

SEC. 2. Any person, firm, or corporation violating the provisions of this ordinance shall be fined not less than \$5 nor more than \$25 for each offense.

Burial and Removal of Bodies—Permits—Death Certificate. (Ord. July 28, 1913.)

That section 1245 of the Chicago Code of 1911 be, and the same is hereby, amended so as to read as follows:

"1245. *Unlawful burials, removals, etc.—Permits.*—Hereafter it shall be unlawful for any person to move the dead body of any human being, or any part of such body, from any hospital or from place to place within the city of Chicago, or from the said city, or to cremate or deposit any human body in any vault within the city, or to inter or disinter, or in any manner dispose of, any dead human body or part thereof, without first obtaining a permit so to do from the commissioner of health or his duly authorized representative; nor shall any dead human body or part thereof be disposed of otherwise than in accordance with the terms of said permit. Permits for the removal, interment, cremation, or disposal of dead bodies shall be issued only upon the presentation of a proper death certificate to the commissioner of health or his duly authorized representative. Said death certificate shall be signed by a duly licensed physician, who had attended the deceased during his or her last illness, or by the coroner of Cook County, or, if the death occurred outside of Chicago, the permit of the proper authority at the place where death occurred. Any permit issued in accordance with the provisions of this section may be recalled by the commissioner of health at any time after the issuance thereof, whenever he shall have evidence that such permit was issued on improper or insufficient information contained in the death certificate, or when it is found that the conditions of the permit are not complied with, and any undertaker or other person holding such permit shall, upon notification of its recall, forthwith surrender such permit to said commissioner of health."

Communicable Diseases—Preparation of Bodies for Burial—Coffins—Funerals.
(Ord. July 28, 1913.)

That section 1248 of the Chicago Code of 1911 be, and the same is hereby, amended so as to read as follows:

"1248. *Burials by department of health—Preparation for burial of person dead of contagious or infectious disease.*—Bodies of persons who have died of smallpox or bubonic plague shall be buried by the department of health, and in accordance with the rules and regulations fixed by the commissioner of health.

"Bodies of persons who have died of typhus fever, or ship or camp fever, epidemic cerebrospinal meningitis or fever, diphtheria, membranous croup, croup (unless proven to be nondiphtheritic), scarlet fever, scarlatina, scarlet rash, measles, anthrax, infantile paralysis, or leprosy shall be prepared for burial in a manner so as to avoid the spread of disease, and before being placed in the coffin shall have all orifices closed with plugs of cotton saturated with an efficient disinfecting fluid, and shall then be wrapped in a sheet saturated with an efficient disinfecting fluid; provided that in case of death from any disease the symptoms of which so resemble the symptoms of any one of the above-named contagious or infectious diseases that such case can not be immediately distinguished from such contagious disease, the same sanitary precautions shall be taken as are required by this article in the care of bodies which have died of the said contagious diseases."

That section 1249 of the Chicago Code of 1911 be, and the same is hereby, amended so as to read as follows:

"1249. *Character of coffin to be used for burial of person dead of contagious or infectious diseases.*—Every casket, coffin, or other receptacle used to contain the body of any person who has died of a contagious or infectious disease shall be so constructed that the bottom of the same is water-tight, and shall be closed with a well-fitting cover, and before being used for the burial of any such body or for conveyance to any cemetery or place of burial of any such body, shall be approved as to its compliance with the provisions of this ordinance by the commissioner of health or his duly authorized representative. Any persons licensed as an undertaker, or who is in charge or control of any undertaking establishment, or any other person who shall supply or use, or permit to be supplied or used, for the burial of the body of any person who has died of a contagious or infectious disease, any coffin, casket, or other receptacle for such body which has not been approved by the commissioner of health or his duly authorized representative, shall be deemed guilty of a violation of this section."

That section 1250 of the Chicago Code of 1911 be, and the same is hereby, amended so as to read as follows:

"1250. *Funeral of person dead of contagious disease.*—No person shall conduct or manage, or permit to be conducted or managed, anywhere within the city, the funeral of any person who has died of any disease named in section 1248 of this article, except as hereinafter provided. The body of any person who has died from any one of the diseases mentioned in said section 1248 shall be buried or cremated within 48 hours from the time of death. No person whose attendance is not necessary for the conduct of the funeral of any person who has died of any one of the diseases hereinbefore mentioned shall be permitted to enter the premises where the death occurred; provided, however, that nothing herein contained shall be held to prevent the attendance or presence at any such funeral of any adult relative of the deceased person, or any adult member of the family of such deceased person, who shall have been in attendance upon such deceased during his last sickness, and who shall have been exposed prior to such funeral to the disease from which such person died; and provided further, that other persons desiring to accompany or follow the remains of the deceased to the grave may do so if they do not enter the premises where the death has occurred and do not occupy the same vehicles as the persons who have entered said premises."

That section 1251 of the Chicago Code of 1911 be, and the same is hereby, amended so as to read as follows:

"1251. *Certain articles not to be taken into or from premises where death from contagious disease has occurred.*—No person shall take into any premises, room, or place in which any person shall have died of any of the diseases mentioned in section 1248 at any time after such person shall have died, and before such premises, room, or place shall have been disinfected by the department of health, any funeral rug, flowers, drapery, or other article or thing which may be the means of spreading contagion, nor shall any person take from any premises, room, or place in which any such death shall have occurred any article or thing whatever which shall have been exposed to infection, or which may be the means of spreading contagion, until such article or thing shall first have been disinfected by the department of health, or unless the removal of such article is authorized by the commissioner of health or his duly authorized representative: *Provided*, That nothing herein contained shall be construed to prevent the use of proper clothing and wrappings which shall be buried with such body."

Foodstuffs—Sale of Unwholesome Prohibited. (Ord. July 28, 1913.)

SECTION 1. That article 20, chapter 38, of the Chicago Code of 1911, be, and the same is hereby, amended by adding thereto a section to be known as section 1366a in words and figures as follows:

"1366a. Any persons, firm, or corporation who, either as principal or agent, shall sell, offer, or exhibit for sale, or have in his or its possession, charge, or control, with intent to sell, any article of human food or foodstuff, either raw, manufactured, or otherwise prepared, which is or has become putrid, decayed, infected, contaminated, or unwholesome for human consumption, shall be fined not less than \$1 nor more than \$200 for each offense."

Garbage—Reduction Plant Placed Under Department of Health. (Ord. July 30, 1913.)

Ordered, That in the event the city council determines to purchase the reduction plant of the Chicago Reduction Co., located at Thirty-ninth and Iron Streets, and said plant having been turned over to the city of Chicago, that the same shall be operated under the supervision and direction of the department of health.

Manure and Refuse—Care and Disposal of. (Ord. Nov. 24, 1913.)

That section 1003 of the Chicago Code of 1911 be, and the same is hereby, amended to read as follows:

"SEC. 1003. *Manure storage.*—It shall be the duty of every person, firm, or corporation occupying or controlling any lot, barn, stable, shed, building, or place where horses, mules, cattle, or swine, or any of them, are kept or fed, within any part of the city of Chicago, to provide, set apart, and maintain within said lot, barn, stable, shed, building, or place, above the level of the ground upon said premises, either a box, receptacle, or vault constructed as hereinafter provided; provided that in lieu of said box, receptacle, or vault there may be provided and maintained within any barn, stable, shed, or building where horses, mules, cattle, or swine, or any of them are kept or fed, but not elsewhere, a bin with a floor of impervious cement and walls of the same material not less than 4 feet high above level of floor; and said person, firm, or corporation shall place or cause to be placed in said bin, box, receptacle, or vault all the manure produced upon the said premises and shall remove or cause to be removed from the said premises at his, her, or its own expense the contents of said bin, box, receptacle, or vault at least once in 72 hours.

"Every wooden box for the storage of manure shall be strongly framed and built and shall have the bottom and inner surface of walls covered with sheet metal and shall have a tightly fitting wooden cover so constructed as to be fly proof, and be of a capacity to hold all the manure produced on the premises in 72 hours.

"Every metal receptacle for the storage of manure shall be a heavy metal receptacle of sufficient thickness of metal and so made and brazed as to maintain its form under heavy usage, and such receptacle shall be closed with a tightly fitting cover so as to be fly proof, and said receptacle shall be of a capacity to hold all the manure produced on the premises in 72 hours.

"Every vault for the storage of manure shall be a strong masonry vault, the walls and floor of which shall be at least 6 inches thick, its surfaces, outside and inside, smoothly finished and its interior corners rounded so far as practicable, and said vault shall be provided with a fly-proof cover or door and shall be of a capacity to hold all the manure produced on the premises in 72 hours.

"Every bin, box, receptacle, or vault shall be constructed under a permit issued by the commissioner of health, for which permit a fee of \$1 shall be collected by said commissioner.

"It shall be unlawful to accumulate or store manure in an open yard or lot or in any wagon, car, or vehicle, except in and during the actual process of transporting manure from one place to another place.

"Every bin, box, receptacle, vault, wagon, car, or vehicle for the storage and transportation of manure shall be maintained in good repair, dry, and in clean condition as to all its parts and surroundings."

That article 1 of chapter 31 of the Chicago Code of 1911 be, and the same is hereby, amended by adding thereto a section which shall be known as section 1003a, in the words and figures following:

"*SEC. 1003a. Manure storage in alleys.*—It shall hereafter be unlawful to erect or construct in any street, alley, or public place any box, receptacle, or vault for the accumulation or storage of manure, and after January 1, 1916, it shall be unlawful to use or maintain any box, receptacle, or vault now located in any street, alley, or public place for the accumulation and storage of manure.

"It shall be unlawful to use any box, receptacle, or vault now located in any street, alley, or public place for the accumulation and storage of manure, unless such box, receptacle, or vault is strong and sound, fly proof, provided with a cover and kept closed except during the times of filling and emptying, and the commissioner of health may condemn and forbid the use for the accumulation and storage of manure of any box, receptacle, or vault in any street, alley, or public place which is not maintained in compliance with the provisions of this section."

That section 1004 of the Chicago Code of 1911 be, and the same is hereby, amended to read as follows:

"*SEC. 1004. Deposit of manure and other offensive material—Burning bedding.*—No person or corporation shall pile or deposit or cause to be piled or deposited any manure, offal, garbage, or any accumulation of any offensive or nauseous substance anywhere within the city except at such place as may be authorized by the commissioner of health in and by a written permit issued for such purposes; and no person or corporation shall permit or allow any cart or other receptacle in his or its possession, charge, or control and which is loaded with any such substance to remain or stand upon or along any railroad, street, or public way within the city, within 200 feet of any building, structure, or premises occupied or used for residence purposes.

"No person or corporation shall place or cause to be placed upon any street, sidewalk, or public way, or upon the roof of any building, or upon the surface of any lot or parcel of ground, any straw, hay, shavings or other substance which has been used as bedding for animals, for the purpose of drying such substance or storing same; nor shall any person or corporation burn or cause to be burned any such straw, hay,

shavings, or other substance which has been used as bedding for animals, in any place other than a properly constructed crematory, and then only upon a permit issued in writing by the commissioner of health for that purpose."

CINCINNATI, OHIO.

Privies and Cesspools—Abolishment of. (Ord. 71, Feb. 4, 1913.)

SECTION 1. That section 545 of the code of ordinances be amended to read as follows:

"SEC. 545. *Vaults.*—On all premises connected to the public sewer where vaults or school sinks or catch basins are now in existence on such premises such vaults must be abolished, and such school sinks or catch basins if found to be in an insanitary condition by the board of health or the commissioner of buildings must be abolished, and such vaults or catch basins or school sinks emptied and thoroughly disinfected and filled with earth, or else, with the approval of the commissioner of buildings, covered with stone or concrete, at least 4 feet below the surface of the earth, and no new vaults, catch basins, or school sinks may be constructed on any premises. In place of such abolished vaults, outside water-closets may be constructed as hereinafter provided, and used in connection with existing tenement houses, and they may be constructed with, and their contents discharged into, such public sewer. Such water-closets must be constructed of vitrified earthenware or porcelain-lined cast iron and have suitable flushing apparatus, and must in every respect be an approved water-closet outfit; provided, that suitable provision be made to prevent freezing and to keep the closets at all times in proper working order."

SEC. 2. That said original section 545 as amended by ordinance 181, passed March 29, 1912, be, and the same hereby is, repealed.

Cream—Standard for. (Reg. Bd. of H., Apr. 2, 1913.)

No person, firm, or corporation shall bring into the city of Cincinnati for the purpose of selling, or shall sell, or offer for sale, or have in his possession in said city with intent to sell, any cream unless such cream is produced from milk that conforms with all the rules and regulations of the board of health of the city of Cincinnati and of the State of Ohio relating to milk; and such cream shall not contain less than 18 per cent of milk fat.

Buildings—Sanitary Care of—Order of Vacation. (Ord. 73, Feb. 4, 1913.)

SECTION 1. That the code of ordinances of the city of Cincinnati be supplemented by ordaining a supplementary chapter to Title VII, entitled chapter 4a to read as follows:

"Chapter 4a. *Regulation of insanitary buildings.*—SEC. 745 (1). It shall be unlawful for any person, firm, or corporation to lease, let, permit the occupancy of, permit the continuation of the occupancy of, or continue the occupancy of any structure or building or any portion thereof, used for human habitation, unless such structure or building or portion thereof be free from unclean and insanitary conditions as defined in the subsequent sections of this chapter and unless the provisions of said subsequent sections are complied with.

"SEC. 745 (2). Any structure or building or any portion thereof used for human habitation shall be deemed to be in an unclean and insanitary condition by reason of any portion of such building being infected with a communicable disease, or by reason of the absence therein or thereon of toilet facilities as required by law or ordinance, or by reason of the known presence of sewer gas therein or thereon.

"Any structure or building or any portion thereof used for human habitation shall be deemed to be in an unclean and insanitary condition when unfit for human habitation or in a condition dangerous or harmful to the lives or health of the occupants by reason

of the inhabited portion of the house being damp or wet, or by reason of such lack of repair, or by reason of such accumulation of dirt, filth, litter, refuse, or other offensive or dangerous substances or liquids, or by reason of such defects in or lack of repair of or improper use of the drainage, plumbing, or ventilation, or by reason of the existence on the premises of such a nuisance or other condition as is likely to cause sickness among the occupants.

"SEC. 745 (3). Any structure or building, or any portion thereof, used for human habitation which is in said unclean or insanitary condition is hereby declared to constitute a public nuisance.

"SEC. 745 (4). Whenever the said board of health of the city of Cincinnati ascertains from examination or reports of its inspectors or sanitary officers or otherwise that a public nuisance exists, as defined in the foregoing sections 2 and 3 of this chapter, in or upon any structure or building, or portion thereof, and is of the opinion that such nuisance is capable of being abated without immediate vacation of the premises or such portion thereof, and serves notice upon the owner of such house, or his lessee or agent, or the person in possession, charge, or control thereof, directing him to abate such nuisance and remove the unclean or insanitary conditions within such reasonable time as may be fixed by said board and specified in said notice, it shall then be the duty of such owner, agent, or person to abate such nuisance within such time. Whenever such abatement does not take place within such time, or whenever, in the opinion of said board, such abatement is impossible or impracticable without an immediate vacation of the house or portion thereof, and said board serves notice upon the owner, lessee, agent, or person in possession, charge, or control thereof to vacate or cause the vacation of such house, or portion thereof designated in the notice, then it shall be the duty of such owner, lessee, agent, or person to vacate or cause the vacation of such house, or portion thereof within 20 days from the date of the service of such notice, or within a shorter time (not less than 24 hours in any case), as may be specified in said notice. Whenever, either in addition to or without the service of said notices on said owner, lessee, agent, or person in possession, charge, or control, the said board is of the opinion that such nuisance can be abated by a tenant or other occupant of such house or portion thereof and such notices, either for abatement of the nuisance or of vacation of the premises, are served upon such tenant or other occupant, then it shall be the duty of such tenant or other occupant to comply with the terms of such notices and to abate the nuisance or vacate the premises accordingly.

"After any such notice or order of vacation it shall be unlawful to occupy or permit the occupancy of such premises or portion thereof until such nuisance shall have been completely abated and such building or portion thereof shall have been rendered clean and sanitary in accordance with the terms of said notices of the board of health. When there is no owner, agent, lessee, or person in charge, possession, or control, who is a resident of or can be served in the city of Cincinnati, then personal service outside of said city on any such owner, agent, lessee, or person in charge, possession, or control, by anyone delegated by said board of health to make such service, or by registered letter, or if the address of the owner, lessee, agent, or person in possession, charge, or control be unknown, or service be not secured by registered letter after effort so to do, by notice by publication once a week for two consecutive weeks in any newspaper of general circulation in Cincinnati, or posting or attaching to or on the outside of said structure or building of a copy of the notice or order consecutively for two weeks, shall have the same effect as service within said city.

"SEC. 745 (5). When the insanitary condition of any such building or part thereof is, in the opinion of the said board of health, due to the violation of any of the provisions of the building code of Cincinnati, being sections 332 to 577, inclusive, of the code of ordinances of the city of Cincinnati, and the ordinances and sections amendatory thereof and supplementary thereto, and said board shall certify such fact to the commissioner of buildings of the city or chief housing inspector of the city, respec-

tively, in charge of the enforcement of the particular section or ordinance thus violated, it shall thereupon be the duty of said commissioner or chief housing inspector to proceed, in accordance with the provisions of said building code, to enforce the provision thus violated; and thereupon, in addition to the powers of said commissioner and chief housing inspector, respectively, and the methods of enforcement provided in said building code, said commissioner or chief housing inspector may issue and serve, publish, or post an order or notice of vacation upon like terms and conditions and of like purport as is provided in section 4 of this chapter for orders of vacation issued by the board of health; and it shall be the duty of the person, firm, or corporation thus notified to comply with the terms of such notice and to vacate or cause the vacation of the building or portion thereof until the said provisions of the building code shall have been complied with. Without any certification from the board of health, the said commissioner of buildings or chief housing inspector may, respectively, in accordance with the division of their respective jurisdictions over the enforcement of such sections of the ordinances, enforce the provisions of sections 530, 531, 532, 533, 534, 535, 536, 537, 538, 538a to 538c, 539, 540, 542, 543, 544, 545, 546, 547, 548, 549, 550, 550a, 551, 552, 553, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, and 567 of the code of ordinances of the city of Cincinnati, and all sections now or hereafter passed amendatory and supplementary thereto, by issuing and serving, publishing or posting notices or orders of abatement and vacation upon like terms and conditions and of like purport as is provided in section 4 of this chapter for notice and orders of abatement and vacation issued by the board of health; and it shall be the duty of the person, firm, or corporation thus notified to comply with such notices and orders. All such notices and orders of the said commissioner or chief housing inspector shall be subject to appeal as provided in section 338 of the code of ordinances.

"SEC. 745 (6). When the notice or order of vacation follows a notice or order of abatement, as provided in sections 4 and 7 of this chapter, such notice or order of vacation shall not be enforced as provided in this chapter, unless said notice or order of abatement specifies a time when the person so notified or ordered may appear before the board or officer issuing same to show cause why such order or notice of vacation should not be issued and unless said board (or a majority thereof) or officer is present at its or his office at the time so specified; such time to be not less than 24 hours after the service of the notice or order. When the notice or order of vacation is issued, as provided in section 4 of this chapter, without a previous notice or order of abatement, such notice or order of vacation shall not be enforced as provided in this chapter unless it specify a time, not less than five days after the service thereof, when the person so notified or ordered may appear before the board issuing same to show cause why such notice or order should not be enforced and said board or a majority thereof is present at its office at the time so specified; provided that when, in the opinion of at least four-fifths of the members of such board, an emergency exists which requires, for the protection of the health of occupants, the vacation of the building or portion thereof without a delay of five days, then no such fixing of a time for hearing shall be required.

"SEC. 745 (7). Whenever such procedure is, in the opinion of the board of health, commissioner of buildings, or chief housing inspector, respectively, desirable or necessary said board of health, commissioner of buildings, or chief housing inspector may affix conspicuously on the buildings or part thereof the notice or order of vacation.

"SEC. 745 (8). When the notice or order of vacation has not been complied with, and the board of health or commissioner of buildings or chief housing inspector certifies such fact, together with a copy of the order or notice, to the chief of the police department of the city, it shall then be the duty of said chief and the members of the police department to enforce such notice or order of vacation and to cause the said premises to be vacated in accordance with the terms of such notice or order.

"SEC. 745 (9). Whenever the board of health or the commissioner of buildings or chief housing inspector shall certify to the city solicitor any failure to comply with any such order or notice of vacation, with the request that the city solicitor institute civil proceedings for the enforcement thereof, the city solicitor is hereby authorized to and shall institute any and all proceedings, either legal or equitable, that may be appropriate or necessary for the enforcement of such order or notice and the abatement of the nuisance against which such order or notice was directed; such suits or proceedings to be brought in the name of the city of Cincinnati, and no such suits or proceedings shall be held to exclude any criminal or penal proceedings which may be authorized by this chapter or any of the laws and ordinances in force in this city, or to exempt anyone violating this or said laws and ordinances from any penalty which may be incurred.

"SEC. 745 (10). The making of decisions and issuance of orders as above provided for may be delegated by the board of health to the health officer of the city, and when so delegated the making of any such decision or the issuance of any such order by the said health officer shall have the same effect as above provided for the opinion, decision, or order of the board of health.

"SEC. 745 (11). Any person or persons, firm, or corporation violating any of the provisions of this chapter or failing to conform to any of the provisions thereof, except an agent without authority in the premises so to do, shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be fined not less than \$5 nor more than \$50.

"SEC. 745 (12). The procedures, methods of enforcement, and penalties herein provided shall be held to be in addition to and as in no wise taking the place of or modifying or repealing the procedures, methods of enforcement, and penalties provided in the statutes of Ohio, and the laws and ordinances of the city of Cincinnati relating to buildings and the board of health."

SEC. 2. The invalidity of any clause, provision, or part of this ordinance shall not be held to affect the validity of the remaining clauses, provisions or parts thereof.

Factories—Sanitary Care of. (Reg. Bd. of H., Nov. 26, 1913.)

SEC. 5. It shall be unlawful for any firm, corporation, or other employer of labor to fail to provide ample ventilation in the factory or room occupied by the employees, and it shall be the duty of the employer of labor to prevent the dissemination or scattering of dust during the period when the employees are engaged at work.

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SEC. 13. No toilet room shall be so constructed that it will ventilate directly into any workroom of a factory or manufacturing concern, or into any room where the employees or public assemble; and in all such places, if ventilation can not be secured by means of outside windows or an adequate duct to the outside air, it shall be the duty of the owner, firm, corporation or person responsible to have a mechanical exhaust system of ventilation installed, such that the air may be completely changed at least once every 15 minutes.

Garbage and Refuse—Care of. (Reg. Bd. of H., Nov. 26, 1913.)

SEC. 6. It shall be unlawful to permit garbage, offal, or other putrescible organic matter to accumulate in open piles, in uncovered cans, baskets, boxes, or other uncovered, broken, or nonflyproof receptacles in this city. It is hereby made the duty of the owner, tenant, or other person responsible to provide tightly covered metallic, water-tight, flyproof receptacles of such size and number that it or they will amply hold all the garbage that may accumulate during the intervals between the regular collections by the city. In all one-family houses or houses where each family has its own yard, toilet facilities, etc., it is hereby made the duty of the occupant to furnish the above-described receptacle for garbage.

SEC. 7. It shall be unlawful for any person to throw, let fall, or permit to drop out of any window, or from any roof, porch, or other elevated place, any garbage, offal, ashes, paper, filth, fruit peelings or skins, or other useless waste material.

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SEC. 14. Wherever sewer connections are provided, it shall be unlawful for any person to discharge, throw, or pour any slops, wash, sink, or other filthy water, fluid, or matter into or on any alley, street, yard, or vacant lot.

Premises—Sanitary Care of. (Reg. Bd. of H., Nov. 26, 1913.)

SECTION 1. It shall be unlawful for the owner or other person responsible for any premises inhabited or occupied by human beings to permit any toilet fixtures, vault, cesspool, catch basin, waste or soil pipe, supply pipe, drain, rain spout, or any conductor of water or sewage to become so broken, faulty, obstructed, leaky, or neglected that the lives or health of the occupants or tenants may be endangered by remaining on or continuing to occupy said premises.

SEC. 2. It shall be unlawful for any person, firm, or corporation to permit the discharge of dust, smoke, fumes, steam, or other waste dirt or gas into the air so as to be a menace to the health, a nuisance, or inconvenience to neighboring individuals.

SEC. 3. No mat, carpet, rug, or cloth shall be shaken, beaten, exposed, or agitated in the open air so that dust or particles set in motion thereby will pass into any dwelling, house, or store, or into any yard where clothes are being dried, or become a nuisance to persons using the public sidewalk or street.

SEC. 4. It shall be unlawful for any person to maintain or permit to be maintained a room or rooms occupied by human beings in such a filthy, dirty, or neglected condition that the health of the occupant, occupants, or the community is thereby endangered.

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SEC. 8. It shall be unlawful for any person to expectorate or spit upon the floor of any factory, store, office, tenement house, rooming house, or other structure used as a workroom for labor or as the home of two or more families.

SEC. 9. It is hereby made the duty of the owner, agent, or person in charge of any premises within the city limits to provide a pure, uncontaminated water supply for the tenant or occupants of said premises, and, if the city water can not be installed, to provide a clean, uncontaminated cistern or well water, and to maintain the said cistern or well water in a clear, uncontaminated condition throughout the year.

SEC. 10. It is hereby made the duty of the owner or person having control of land on which water stagnates to keep thereupon a coating of kerosene or other crude oil sufficient for the destruction of the mosquito larvæ, or wiggle-tails, developing therein, during the months from May to October, inclusive.

SEC. 11. The owners or agents of unoccupied buildings or sheds in the city shall keep them closed at all times against persons who may enter and commit a nuisance therein.

SEC. 12. It shall be the duty of the owner, firm, corporation, lessee, or other person or persons responsible, to maintain the toilet fixtures and toilet rooms in factories, theaters, halls, and other public places in a clean, sanitary condition; to whiten and clean all badly discolored fixtures; to use disinfectants about the toilet room and in the fixtures; to provide paper and to provide an ample number of spittoons in the toilet room.

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SEC. 15. No person shall urinate, defecate, or commit any nuisance whatsoever in any doorway, hall, stairway, alleyway, street, passageway, yard, cellar, attic, or other place aside from the regular sanitary toilet fixtures.

SEC. 16. Whenever the contents of an abandoned or unused cistern, well, or other excavation become a nuisance because of the accumulation of stagnant water, garbage, or other foul product, it shall be the duty of the owner, agent, lessee, tenant, or other person responsible to abate the nuisance by cleaning and by filling the cistern, well, or excavation with clean earth or ashes.

SEC. 17. All nuisances and faulty conditions described and defined in the above paragraphs shall, when their existence is determined by the employees of the health department, be corrected, improved, or eliminated in accordance with the directions and to the satisfaction of the department of health under penalty as provided by law. (Board of Health Regulation No. 76.)

For violation of any regulation of the board of health of the city of Cincinnati, county of Hamilton, State of Ohio, prosecution proceedings may be brought against the owner, agent, lessee, occupant, tenant, firm, corporation, dealer, receiver, administrator, executor, or any other person, firm, or corporation responsible for such violation. (Board of Health Regulation No. 77.)